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REPORT

OF THE

COMMISSIONER OF EDUCATION

FOR

THE YEAR ENDED JUNE 30, 1907

VOLUME 1

WASHINGTON
GOVERNMENT PRINTING OFFICE
1908

THE UNITED STATES
BUREAU OF EDUCATION.

Created as a Department March 2, 1867.

Made an Office of the Interior Department July 1, 1869.

COMMISSIONERS.

HENRY BARNARD, LL. D.,
March 14, 1867, to March 15, 1870.

JOHN EATON, PH. D., LL. D.,
March 16, 1870, to August 5, 1886.

NATHANIEL H. R. DAWSON, L. H. D.,
August 6, 1886, to September 3, 1889.

WILLIAM T. HARRIS, PH. D., LL. D.,
September 12, 1889, to June 30, 1906.

ELMER ELLSWORTH BROWN, PH. D., LL. D.,
July 1, 1906, to date.

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REPORT OF THE COMMISSIONER OF EDUCATION.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, March 13, 1908.

SIR: I have the honor to submit herewith the Annual Report of this Office for the year ended June 30, 1907.

Some of the causes of delay which in recent years have hindered the prompt issuance of the reports of this Office are now happily removed, and it is hoped that these reports may for the most part come into the hands of those who wish to use them within a twelve-month following the close of the year to which they relate. In particular, the action of the Congress in providing by an urgent deficiency appropriation for the publication of the report of this year as soon as it should be ready for the printer will be heartily welcomed by all of those to whom an early publication is a matter of practical concern.

The arrangement of the present report does not differ greatly from that of its immediate predecessors, except in one important particular. The statistical portion is compressed by the omission of the detailed statistics of secondary schools, which have occupied ordinarily from 250 to 300 pages. The summaries of the statistics of secondary schools are still presented in full, the omitted portion being only that which gives particular information concerning each school separately. As a matter of general convenience these details are omitted from the annual report. The question as to publishing them separately in an issue of the Bulletin of the Bureau of Education is now under consideration. This compression of the statistical matter contained in the report has made it possible to bring all of that matter into the compass of the second volume. As a matter of convenience, accordingly, the general survey and analysis of the statistical tables, which has usually formed a part of the Commissioner's introduction, will form in this report a special introductory chapter in the second volume.

The preparation of such an analytic survey and summary of the statistics of the year has been committed to the hands of Prof. Edward L. Thorndike, of Teachers College, Columbia University.

Professor Thorndike's studies in educational statistics are already widely known for the thoroughness of their method and the significance of their conclusions. The effort has been made to render the tables to be brought under such review this year as accurate and informing as possible. With this end in view, before the inquiry blanks were sent out for the collection of this information, they were carefully revised in cooperation with Professor Thorndike by the statistical division of this Office.

After all pains have been taken, however, the preparation of such tables still proceeds under the greatest difficulties, which can be overcome only by cooperation on the part of local, State, and national education offices. At a conference of the chief school officers of the several States with the Bureau of Education, held in Washington on the 24th of February, 1908, steps were taken looking to more fruitful cooperation in this field. The Bureau of Education is peculiarly dependent upon the cooperative spirit among the school officers of the country, for it can only ask for information, which is given voluntarily or not at all. If ways can be devised by which the avoidable delays and omissions can be materially lessened, it should be possible to have the statistical portions of these reports ready for the printer within six months of the close of the year to which they relate and distributed to readers, in their published form, within two or three months thereafter.

The first volume of the report herewith presented brings together information with reference to educational movements, both American and foreign, belonging to the scholastic year of 1906–7 and the years immediately preceding.

THE WORK OF THE BUREAU OF EDUCATION.

A brief statement of the work of the Bureau of Education as it is now organized is contained in Chapter I. The Bureau was established as an independent department in 1867 and was made an office in the Department of the Interior on July 1, 1869. Its growth has been gradual, but very slow, and not at all commensurate with the growth of the educational interests of the country which it is intended to serve. At the present time, the force of the Bureau consists of fifty-one persons, organized in five divisions, as follows: Division of Correspondence and Records, Division of Statistics, Division of Editorial Work, Library Division, and Alaska Division. The work of each of the divisions is described in the chapter referred to.

Plans are under consideration for a gradual expansion of the work of the Bureau. Such expansion is absolutely necessary if it is to render in this present time the service for which it was established. In order that it may fulfill its purpose as an active center of educational influence and information for the whole country, there must

be added to the present force a number of highly competent specialists, who will be able to make special investigations respecting industrial education, rural schools, agricultural and mechanical colleges, higher education, the construction and equipment of school buildings, the hygiene of education, the welfare of children as affecting educational efficiency, educational legislation, the records and accounting of educational systems and institutions, and a variety of other subjects in education, and diffuse helpful advice and information touching these subjects. The call for such information and assistance is continuous and urgent, and adequate provision should be made in the immediate future to enable the Bureau to furnish it.

Assistance has been rendered for some years to students of edutional questions by furnishing them with references to the literature of the subjects under investigation. It is planned to extend this service very largely as soon as the facilities for the proper execution of the work may be provided. The collection of books on education must be added to largely, so that the literature at hand of the various phases of education may be fairly complete and contain at least all of the important works relating to those subjects. The bibliographies of the more important subjects should be put in printed form and made readily accessible to the educational public.

The plans for the work of the Bureau with respect to the education, care, and support of the natives of Alaska and the management of the Government reindeer in Alaska are outlined in Chapter XV.

AGRICULTURAL AND MECHANICAL COLLEGES.

No other function of the Bureau of Education offers larger possibility of useful service than that devolved upon it in consequence of the statutory provision making the Department of the Interior responsible for the distribution of the Congressional appropriations to the "land-grant colleges"—that is, to the colleges of agriculture and the mechanic arts established under the Morrill Act of July 2, 1862, and further endowed under the second Morrill Act of August 30, 1890.

During the year covered by this report the Federal Government made provision for greatly increased aid to these colleges. The new enactment is properly known as the Nelson amendment to the act making appropriations for the Department of Agriculture for the year ended June 30, 1908, and provides that the appropriation to each State and Territory for the year ended June 30, 1908, shall be increased by $5,000, and that an additional increase of $5,000 per annum shall be paid thereafter until the annual appropriation to each State and Territory amounts to the sum of $50,000, which shall be the amount to be paid annually thereafter. The act provides that the additional amounts appropriated shall be expended for the purposes specified in the act of August 30, 1890, with the proviso, how-

ever, that a part thereof may be used for the preparation of teachers of elementary agriculture and mechanic arts. By means of this additional appropriation, the colleges of agriculture and the mechanic arts will be enabled to provide instruction designed to prepare teachers for the secondary schools of agriculture and for other industrial schools for whose establishment provision has been made in a number of States, notably in Alabama, Connecticut, Georgia, Massachusetts, Michigan, and Wisconsin. But it is not only for the separate industrial schools that teachers must be provided, but also for the many industrial departments that will be established in connection with existing schools of various grades. Special provision for the training of teachers in such departments and schools has already been made by the agricultural and mechanical colleges of Connecticut, Illinois, Maine, Massachusetts, Mississippi, Missouri, New York, North Carolina, North Dakota, Rhode Island, Tennessee, and Utah. Similar provision will undoubtedly be made by other institutions of this class.

The statistics of the agricultural and mechanical colleges, furnished by the presidents and treasurers of the several institutions, are given in detail in Chapter XXIII and show that the year has been one of marked progress. The chapter contains, also, a summary of the legislation affecting these institutions which was enacted by the legislatures that were in session in 1907. Five States—Arkansas, Colorado, Connecticut, Minnesota, and North Carolina—enacted legislation affecting their governing boards. Other legislation consisted in the main of appropriations for the current expenses of the institutions and for new buildings. An appropriation that deserves special mention is that of $50,000 per annum for the graduate school of the University of Illinois. It is, I think, the first appropriation made specifically for a graduate department of a university by any State legislature.

That these institutions are extending their work is shown in the chapter by a recapitulation of new courses of study that were established during the year.

HARRIS BIBLIOGRAPHY.

Especial interest attaches to the list of the published writings of Dr. William Torrey Harris, which has been prepared with great care in the library division of this Office and appears in Chapter II. Doctor Harris's great service as Commissioner of Education from 1889 to 1906 is known and valued throughout the world, together with his other large contributions to American scholarship and American civilization. But his writings have been widely scattered, and no comprehensive list of them has hitherto been available. This bibliography will supply a need which has been keenly felt by students of philosophy and education.

EDUCATION IN GREAT BRITAIN AND IRELAND.

The review of education in Great Britain contained in Chapter III relates particularly to recent legislative and administrative measures indicating purposes common to the two divisions of the country, England (with Wales) and Scotland, but subject to historic influences peculiar to each.

As regards England, the year has been marked by the passage of several measures of great importance. The education (administrative provisions) act comprises nearly all the noncontroversial features of the defeated bill of 1906. Among these are medical inspection of schools and the increase of the powers of local authorities in respect to prolonging the period of school instruction and providing for higher grade schools, accessible to all classes. The principal cities of England had in various ways already provided for these services, which the recent law extends to the entire country.

The special appropriation of £100,000 "to furnish the means for providing a public elementary school in cases where the only existing school accommodation is wholly of a denominational character" indicates the persistence of the forces making for the popular control of schools.[a]

The passage of a law admitting women to the county and county borough councils incidentally restores to women the opportunity for responsible service in the local control of public education.

In striking contrast with the record in England is the failure of the brief education bill for Scotland, which was limited to urgent remedial measures—medical inspection of schools, aid for poor school children, etc.—all of which purposes are strongly supported by public sentiment in Scotland.

The new legislative measures secured for England have led to plans by the board of education for meeting its new responsibilities. The consultative committee has been enlarged in behalf of interests hitherto not adequately represented in its membership; a medical department has been formed for the purpose of securing expert counsel for the medical inspection of schools; and in accordance with the desire of the Welsh people, as manifested in the effort of last year to secure a council for Wales, the board of education has established a Welsh department, which can deal with the distinctive problem of education in that principality without regard to the very different conditions that prevail in England itself.

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[a] The principle is unconditionally asserted in the bill introduced in the present session of the House of Commons (Feb. 24, 1908), a copy of which is received as this matter goes to press. The bill provides that "in future there shall be but one type of public elementary school provided by the public, controlled by the public, managed by the public, and that the teachers in them shall be appointed without religious tests." While voluntary schools may be aided by an exchequer grant, if they "satisfy all the requirements of the board of education," they are excluded from any share in local taxes.

The provision of elementary schools is now practically equal to the demands of the population throughout Great Britain; hence in this department the improvement of the schools themselves is the chief consideration.

The central authorities are at present engaged in the effort to bring into one comprehensive survey the agencies pertaining to that part of education which follows the elementary stage and reaches up to the university. This task, comparatively simple in Scotland and Wales, is exceedingly complicated in England.

In both England and Scotland 12 years seems to be regarded as the maximum age limit for elementary education. After that limit is reached, the probable future of the child is to be taken into account in shaping the mode and direction of his subsequent training.

In England official sanction is given to a class of "higher elementary" schools intended for the "brighter children" between the ages of 12 and 15 years, "who will, as a class, complete their day school education at the age of 15, and thereupon go out into the world to earn a living in the lower ranks of commerce and industry." These schools are distinctly marked off from the recognized secondary schools, and in respect to them the vocational aim is emphasized. The tendency in Scotland and in Wales, on the contrary, is to coordinate the various grades of schools, and to emphasize in all the educational aim.

The Government lays down the conditions upon which schools may share in the Government grants for education, and thus has a determining influence in respect to the classification of schools, standards, and curriculum. The most significant fact in the recent history of education in England is the increase of this central supervision and direction, without impairment of the jealously guarded independence of local authorities. The importance of the latter is indicated in the chapter before us by a brief reference to the recent extension of their efforts in regard to the social welfare of school children, and by statistical summaries of the elementary schools of London, and of the seven additional boroughs of England having each above 300,000 inhabitants.

The great awakening in England in respect to education as a national force is indicated by the number and importance of the public conferences upon the subject. In particular should be noted the Imperial Conference held in London at the time of the visit of the Colonial Premiers. While the discussions in this conference related to the means of promoting educational unity between different parts of the Empire, incidentally the deeper significance of education as an influence making for universal understanding and good will was emphasized.

Chapter III includes also a brief account of education in Ireland, under the fostering care of the Government.

Recent investigations have stimulated local interest in the elementary schools and have led to wide discussion of the system of examination and grants for intermediate schools. Special importance attaches to the work of formal instruction in agriculture fostered by the department of agriculture and technical instruction for Ireland.

The need of closer relations between the several administrative bodies, namely, the commissioners of national education, the intermediate education board, the agricultural board, and the board of technical instruction, has long been recognized. As a step toward this desirable end, a consultative committee of education, consisting of representatives of each of the bodies named, was constituted by a law of 1899. Plans for still closer union are now under discussion.

The survey of education in Great Britain and Ireland is completed by a tabular view of the universities and colleges of the Kingdom, with an account of the more notable events of the year pertaining to these institutions.

EDUCATION IN FRANCE.

Chapter IV presents a review of current events relating to education in France, together with statistical summaries bringing the record of the comprehensive system of public instruction down to the end of the scholastic year 1905–6. Incidental reference is made also to the private agencies for education which are subject in a measure to the supervision of the public authorities. The endeavor is made throughout the presentation to preserve the historic relations of the facts.

The year has been one of readjustments growing out of the closing of the schools of the religious orders, which down to 1906 bore a very large part in the education of the youth of France. Increased responsibilities have been brought upon the Government by the suppression of these schools, although many of them have simply been transferred to secular management. The continued solicitude of the Government with reference to the spirit and efficiency of all classes of private schools is indicated by a bill introduced in the legislature during the present year providing for additional guarantees of fitness on the part of persons applying for authorization to open such schools. This bill and a measure intended to strengthen the compulsory school attendance law are still pending.

In the department of primary education the chief matters of current interest are the means of increasing school attendance, and of prolonging the period of instruction for that great majority of the young whose school life is necessarily short. The latter effort, which touches the most important problem in the life of the Republic, has taken the form of a veritable crusade.

The recent reforms in the state secondary schools (lycées), relate to changes in the internal conduct of the lycées and in the scheme of secondary studies. The former, which are explained at length in the chapter before us, are of chief interest for the light they throw upon a system of discipline for young men during the period of student life preceding the university stage, which is peculiar to France. It is interesting to observe that while in respect to measures intended to increase the resources and extend the scope of university education, France has been greatly influenced by German standards and ideals, in respect to reforms in the system of training intended for the formative period of life—what may be called the character-building period—precedents are sought in the great endowed schools of England.

Under the new plan of secondary studies authorized by decree of 1902, Greek was made an optional study, and parallel sections or courses of study were instituted, one of which omits both Latin and Greek, the time thus gained being given to modern languages, the sciences, and drawing. From an extended examination of the reports available, it appears that the number of students taking Greek continues to decrease; at the same time the modern course is steadily gaining in numbers. The proportion of students making choice of this course is regarded with some apprehension as indicating the decline of that culture for which France has long been distinguished, and also as a sign of imperfect preparation for the pursuit of the severer studies. This last opinion is strengthened by the increase in the proportion of students who fail to pass the first division of the examination for the bachelor's degree. The facts here noted and the tendencies which they indicate open up problems of great interest to all countries, requiring for their solution wide interchange of experience and opinion.

Among the greatest achievements of the French Republic in the field of education must be counted the development of teaching functions in the university faculties, and the gradual transformation of the isolated groups of faculties, survivals of the imperial system, into autonomous universities.

The searching investigations that led up to the final consummation of these purposes, and the enlarged conception of higher education which they inspired, have brought about also a clear recognition of existing weaknesses in the universities thus recently started upon an era of independent action. The needs specially emphasized at this time, as indicated by the review of this department in Chapter IV, relate to the medical faculties and to the faculties of science which prepare students to enter upon professional training. In response to the urgent appeals of professors, physicians, and others interested in the public health, the Government has constituted a special commission to devise measures for placing medical science in France upon the highest plane as regards equipments and resources.

The activity of the Government in the interest of higher education is seconded by the municipalities—Paris, Marseille, Lyon, Bordeaux, Lille, to name only the larger—which are university centers.

In addition to statistics relating to the institutions under the charge of the Minister of Public Instruction, Chapter IV includes also statistics of the higher technical institutions, and the secondary schools of technology, commerce, and industry, under other ministries. The Government work in these directions is supplemented by a great number and variety of municipal, corporate, and private institutions, which provide systematic training in the arts and trades. The prosperity of the country is largely due to the skill and artistic perceptions of its artisan classes, who not only profit by the special art and technical schools maintained by municipalities and by rich proprietors, but maintain similar schools by their own syndicates.

EDUCATION IN CENTRAL EUROPE.

The chapter entitled "Education in Central Europe" (Chap. V) contains information on a variety of topics which indicate the direction of educational movements in Germany and Austria, such as teachers' salaries, proportion of women to men teachers, examination of the results of school education, legislation intended to separate the schools from the control of the church, treatment of stuttering children, philanthropic aid to teachers, school gardens, number of children to one teacher, illiteracy in Hungary, secondary education, attendance in German universities and normal schools, summer vacations for poor children, and school inspection in Prussia. Comprehensive statistics of public schools in Prussia are published only at intervals of five years, and the results of the school census taken in December, 1906, have not yet been made known, while the results of the census of 1901 have been fully reported and commented upon in earlier publications of this Office.

It is noticeable that there is awakening in Germany a movement to make the education of children more practical; that is, to give it more bearing upon actual life, as is the case in continuation schools in that country, and as is attempted in the later American courses of study for common schools. This movement seems to have had its beginning in reports made by German schoolmen sent to this country to study the results of our school education. The modern ideal of practical education is very strongly sketched in this chapter in a quotation from a work by Professor Tews, of Berlin, entitled "Modern Education." He advocates a closer connection between school and the subsequent duties of life; he would show to the child that what it learns in school has its bearing upon and relation to his future activity, labor, or business. He shows that productive labor, having retreated behind factory walls, fails to exert a wholesome

influence upon the education of children. All productive labor is taken away from the horizon of the child, and in cities he is unable to see the chain of cause and effect; in place of acquiring a sense of responsibility by aiding his father in his work, he is burdened in the school with a much more difficult and oppressive labor, which he can not as yet understand. He is to have only one duty, to prepare himself for life by study. To the child this duty is unnatural and impossible. He does not see life as children in former generations did, when they saw their fathers engaged in wage-earning productive labor at home. The author shows that the conditions of life exert their influence upon schools everywhere. It will be interesting to watch the way toward a solution of these difficulties which the Germans may enter upon.

EDUCATION IN CANADA.

Chapter VII, pertaining to education in Canada, presents statistics of the public schools of the several provinces and a summary of the principal features of their systems of public instruction. This introductory survey is followed by accounts of important changes recently made in the Ontario system, and of what is known as the "Macdonald movement," which pertains to all the provinces.

The changes in the Ontario system are intended in particular to secure more efficient conduct of rural schools, to improve the system of training for teachers, and to insure better salaries for teachers. The creation of an advisory council provides for the due representation of all educational interests in the deliberations that lead to new measures. The newly created office of superintendent of education promises to afford the department the constant assistance of professional experience, separated from the administrative control, which remains wholly in the hands of the minister.

The Macdonald movement, which has attracted wide attention, is an effort particularly to bring rural education into closer relations with the actual conditions of rural life. It is due to the liberal bequests of Sir William C. Macdonald and to the judicious management of Dr. James W. Robertson, who from the first has had direction of the enterprise. The account in the chapter referred to is cited from the evidence given by Doctor Robertson before a parliamentary committee. The directors of the movement have wisely planned to insure that the original experiments in the introduction of manual training in city schools, or of practical gardening and agriculture in rural schools, should be models for future efforts. Ample provision has been made to continue the initiatory experiments long enough to demonstrate their importance; at the same time it has been fully understood that if they were to become permanent features of the public school instruction, they must be

adopted and finally supported by the public authorities. The necessity of material equipment for the work, and of teachers specially prepared to conduct the new branches, has been emphasized throughout the experimental stage, and in a marked manner by the final endowment of Macdonald College. This college, as will be seen by the account given in Chapter VII, is intended to be the permanent source of inspiration for the work.

The chapter concludes with statistics pertaining to the universities of Canada, and a brief notice of Toronto University in its reorganized form.

URUGUAY AND MEXICO.

The general trend of educational ideas in Latin America may be gathered from the notes on education in such widely separated countries as Uruguay and Mexico (Chap. VIII). In Uruguay it appears that the department of primary instruction has succeeded in awakening interest in primary education among the higher classes, and is preparing practical means for extending its influence among the more ignorant and indifferent of the people, who have a large native Indian element in their number. The purpose of the Government, as eloquently expressed by the national inspector of primary instruction, Dr. Abel J. Pérez, is to make of the primary schools the first instrumentality in forming the half-savage natives of the country, as well as the town children, into citizens who shall be conscious of their solidarity and be willing to cooperate in patriotic efforts.

The recent changes in the university course, it will be seen, have a decidedly modern or practical tendency, as shown in the modifications of instruction in the different faculties.

The modernizing tendency is conspicuous also in the present educational movement in Mexico. The inherited conservatism of a Latinized race makes concession to the democratizing influences of the times so far as to give industrial training, even for girls, a conspicuous place in the school programmes. This modern spirit is shown especially, however, in the higher grades of instruction, as in the revised courses in the law and medical schools and in the National School of Engineering, in which latter all the modern branches of engineering, including the electrical and mechanical, as well as the older civil and mining engineering, are taught. Similarly it will be seen that the programmes of the agricultural, commercial, and trade schools are formed after the most recently adopted ideas. This modern or utilitarian scheme of study is not, however, allowed to supersede entirely the more æsthetic studies—music and the fine arts—for the National Conservatory of Music and the National School of Fine Arts provide amply for the study of sculpture, architecture, painting, and music.

JAMESTOWN EXPOSITION.

Chapter IX includes an account of the educational section in the Tercentennial Exposition, Jamestown (1907). In this section special emphasis was placed upon the origin and activities of the prerevolutionary colleges of our country and those of the period immediately following. These were illustrated by rare souvenirs, records, engravings, and portraits, forming one of the most interesting collections that have ever been brought together in this country. In striking contrast with the material pertaining to these early institutions were the exhibits of universities of the present day, illustrating the remarkable expansion of higher education in this country.

The division of secondary and elementary education comprised typical exhibits of public schools from leading cities of the country and collective exhibits from Virginia, North Carolina, and a few other Southern States. The former were intended to illustrate the highest standards and results of public school instruction. The collective exhibits showed the rapid development of public schools in the Southern States, and more particularly the recent improvement in rural schools. These several features of the exhibits are described at length in the chapter referred to, and a brief account is also given of the exhibits in the social economy building, which illustrated the work of the many agencies that are supplementing the efforts of the school in behalf of the children of the nation.

THE INTERNATIONAL CONGRESS ON SCHOOL HYGIENE.

Chapter X contains the report to the President of the United States of the American delegates to the Second International Congress on School Hygiene, held in London, August 5–10, 1907. The fact that there were in the neighborhood of 2,000 persons in attendance at a congress on school hygiene, some from Asiatic countries and Australia, indicates the widespread interest that has been awakened in the subject and the importance that is attached to it. The impression was strongly conveyed to our delegates that there was a "world-wide movement in favor of improved school conditions." The United States, however, was not largely represented, either as to number of delegates or of papers read, only six or eight of the latter out of some two hundred and fifty being by American authors. The most prominent part in the congress was taken by physicians rather than by educators. A brief analysis of some of the more important papers is given, showing the extent and character of the subjects treated.

THE CONFERENCE FOR EDUCATION IN THE SOUTH AND THE SOUTHERN EDUCATION BOARD.

Some account of the modest origin and rapid development of the Conference for Education in the South was given in the Commissioner's report for 1903. In Chapter XI of the present report the Rev.

G. S. Dickerman, the agent of the conference, brings the narration down to a recent date, including a brief summary of the various results accomplished largely through the instrumentality of the conference. The magnitude of these results forms an impressive commentary on the efficacy of the means adopted and the agencies employed. From 1901, the year when the Southern Education Board was organized by the conference in order to prosecute an active educational propaganda, to 1906, the amount raised by local taxation and subscriptions for school purposes increased about 78 per cent in the six Southern States which reported upon this matter. In seven States, over 2,000 schoolhouses were reported to have been built in a single year. The practice of consolidating small schools has become prevalent to a notable extent, as in Tennessee, where in four years the number of schools is said to have been reduced by 630 through consolidation, while at the same time the number of teachers increased 200. The growth of high schools, the introduction of industrial and agricultural training, provision for the better training of teachers, and a demand for more efficient supervision, are other indications that attest the breadth and vitality of the movement inaugurated by the southern conference.

CHARLES D. McIVER.

What Charles D. McIver did for North Carolina and how he did it are appreciatively told in Chapter XII by Mr. Charles L. Coon, of the Department of Public Instruction of North Carolina. In twenty years the educational conditions in North Carolina have been improved in a remarkable degree, and Doctor McIver has been foremost in bringing about the transformation, for such it has actually been. His death in September, 1906, was a loss not only to his own State, but a loss to education throughout the South and throughout the nation as well.

SCHOOL PLAYGROUNDS.

In Chapter XIII is presented an article by the secretary of the Playground Association of America, Dr. Henry S. Curtis. Agitation for playgrounds and other means of recreation and physical improvement is by no means a new thing in America. Benjamin Franklin, over a hundred and fifty years ago, urged that school children be frequently exercised in running, leaping, wrestling, and swimming, in order to "keep them in health, and to strengthen and render active their bodies." Thomas Jefferson recommended that about two hours a day should be taken from study and given to bodily exercise, and in 1818 he suggested means of providing such exercise for students of the University of Virginia, the establishment of which was then under consideration. Gymnastics of the German type was introduced in American schools as early as 1825, and a few years later an extensive propaganda was carried on in behalf of "manual labor in literary

institutions," for the purpose in part of invigorating and preserving the health, and that frequently without reference to pecuniary profit. Physical education, or the study of physiology and hygiene, was one of the most popular subjects of discussion in school meetings in the decade between 1830 and 1840, and one of the conclusions usually reached was that "the ground about the schoolhouse should be extensive enough to permit free, active sports without injury to others." "Calisthenics" came later, and light gymnastics and games under the leadership of the well-known Dio Lewis. Recent years have seen the spread of military drill, introduced during the civil war, the rather extensive introduction of Swedish gymnastics, the increased use of German gymnastics, and the remarkable popularity of athletics in all classes of educational institutions.

All of these have had good effects in the main, and while much more must be done before ideal conditions prevail, as Dr. Curtis shows, the agitation which has continued more or less constantly in various forms for over eighty years has undoubtedly left its impress. It is safe to say that not a school site has been purchased and not a schoolhouse has been constructed in America during the life of the present generation without some consideration of the needs of the children in the matter of physical exercise. That consideration is not always as fruitful as it ought to be, but the fact remains that a playground in some form and to some extent enters into the calculation as a matter of course. Dr. Curtis and his society have a wide field of usefulness in emphasizing the necessity of recreation spaces and in securing practical manifestation of the universal feeling of the necessity for them.

It should not lessen the force of the author's arguments in favor of more ample playgrounds to state that in common experience the conditions in country and village schools are generally more wholesome than in those which he has observed. It is true that few country schools possess grounds of their own large enough for a game of baseball, but it is also true that usually there is abundant space close at hand which may be freely used for such games; and country boys, though they may sometimes loiter about the country store, do not spend their evenings at dance halls, for the very good reason that dance halls do not exist in the country.

Ten-acre parks about schoolhouses would undoubtedly add an attractive feature to country and village life, and it is to be hoped that the example of Far Hills, N. J., described in Dr. Curtis's article, will be extensively followed.

HAWAII, CUBA, AND PORTO RICO.

The report of the superintendent of public instruction of Hawaii (Chapter XIV) illustrates the care which is taken of the education of the mixed population of those islands by the American authorities.

The statistics of the schools of Cuba and Porto Rico, presented in the same chapter, show the improved condition of the school systems of those islands, and the continued advance of such improvement.

EDUCATION IN ALASKA.

The annual report of the chief of the Alaska division of this Bureau is presented in Chapter XV.

For the support of the United States public schools for natives of Alaska during the fiscal year ended June 30, 1907, Congress appropriated $100,000. With this sum the Bureau of Education conducted during the year 52 public day schools, with 58 teachers, an enrollment of 2,639, and an average attendance of 1,139. The average cost per pupil, based on enrollment, was $24.81, and based on average attendance $63.55. The average cost per school was $1,056.91.

To assist the Commissioner of Education in a reorganization of the Alaska school service and of the Alaska reindeer service, Mr Harlan Updegraff, of New York, was appointed to the position of chief of the Alaska division; he entered upon his duties May 1, 1907, and during the summer made the annual inspection of the schools and reindeer stations on the shores of Bering Sea and of the Arctic Ocean. The limits of the two school districts of Alaska were changed, the northern district being formed so as to include all that part of Alaska affected by the reindeer enterprise and placed under the superintendence of Mr. W. T. Lopp. Mr. William A. Kelly was reappointed superintendent of schools in the southern district.

During the fiscal year 1906–7 school buildings, the erection of which had been authorized from the income derived from license fees collected outside incorporated towns in Alaska, were in process of erection at Icy Cape, Point Hope, Teller, Tanana, and Golofnin, all of which were completed before the close of the year, with the exception of the building at Golofnin.

A new appropriation of $100,000 to be used for the establishment and maintenance of additional day schools in the year 1908 became available March 4, 1907. Under this provision for additional day schools Superintendent Lopp was authorized to supervise the erection of school buildings on Little Diomede Island, in Bering Strait, and at Kobuk village, on the Kobuk River, about 300 miles from its mouth; Mr. Franklin Moses, formerly teacher of the public school at St. Michael, Alaska, was authorized to supervise the erection of school buildings at Stevens Camp, Rampart, and Kokrines, on the Yukon River, and at Nenana, on the Tanana River. From the appropriation "Education of natives of Alaska, 1907," the erection of school buildings at Igloo and Sinuk, in northern Alaska, was also undertaken under the supervision of Mr. Lopp.

In the United States day schools in Alaska attention has hitherto been given in the schoolrooms principally to instruction in the use of the English language and in the rudiments of arithmetic and other common branches. The effort is now making to extend the scope of the Alaska school service by emphasizing instruction in agriculture and in industries adapted to the needs of various sections, and by including improvement in the social and sanitary conditions in the native villages.

The obtaining of medical treatment free of charge is one of the most pressing needs of the natives throughout Alaska. The teachers at Barrow, Wainwright, Icy Cape, Wales, Diomede, Igloo, St. Michael, Nulato, Stevens Camp, Copper Center, and Kasaan, where there is no resident physician, and on St. Lawrence Island, where the teacher is himself a physician, have been furnished with medical supplies and medical text-books, in order to enable them to give aid to the natives. It is hoped that small hospitals or single wards may be provided later in connection with the schools in the remote villages where medical aid can not otherwise be obtained, and that two or three well-equipped hospitals may be established in central locations, where regular medical and surgical treatment may be provided and where natives may be trained to serve as nurses in their home communities.

Sixteen stations are now centers of reindeer industry, extending from Point Barrow southward almost to the shores of the Pacific Ocean and eastward to the center of Alaska. The total number of reindeer in the district of Alaska is 15,839. Of this number 41 per cent are owned by Eskimo reindeer herders and apprentices, 23 per cent by the United States Government, 22 per cent by mission stations, and 14 per cent by Lapp instructors in herding. A code of rules, contract forms, and blanks for records and reports have been provided, by means of which the reindeer enterprise has been reduced to an orderly system of industry and training. The purpose of this system is the distribution of the reindeer among the natives as rapidly as they can be taught to care for such property and to profit by the possession and use of it. Already the percentage of the reindeer owned by natives is steadily rising and the percentage held by the Government is steadily falling. Under the operation of the present plan the total holdings of the Government may be expected to reach their maximum and to begin to decline in the near future.

CURRENT TOPICS.

Chapter XVI contains information on a number of subjects of current interest. The following may be noted here:

Educational associations.—For a number of years past the demand for increased facilities for industrial education has become insistent.

Industrial changes are going forward with great rapidity, the tendency of our rural population to gravitate toward the cities has continued, and the need of a better industrial education for our city population has been emphasized by the increasing severity of world competition. One of the ways in which the demand for industrial education has been brought before the public is the introduction into the Congress of the United States of a number of bills providing for Federal aid to industrial education in normal and secondary schools in the several States and Territories. In a number of the States, notably in Alabama, Connecticut, Georgia, Massachusetts, Michigan, and Wisconsin—legislative provision has been made for the establishment of industrial schools of secondary grade. In the attempt to meet the demands for such instruction great care should be taken to study the needs of the various sections of the country, so that whatever legislation may be enacted, whether by the nation or by the several States, may be suited to the various localities. Such investigations should be made by the Federal Government, and the results should be made available to persons who have in charge the shaping of legislation in behalf of industrial education. Other agencies may, however, do much good work in the collection and dissemination of information on the subject, and in advocacy of the general movement, and it was for such purposes that the National Society for the Promotion of Industrial Education was organized. A brief description of the purpose and work of this society is given in the chapter.

Another important association which was organized during the year is the American School Hygiene Association, which has for its purpose the improvement of hygienic conditions surrounding children during school life. The association includes among its members a number of persons who have given much time to the investigation of questions connected with the health and welfare of school children. The investigations conducted by the members of the association and the discussions of the problems of school hygiene will undoubtedly prove of great service in the betterment of the health conditions of our school population.

Compulsory attendance.—The annual term of obligatory attendance has now been extended to include the entire time the schools are in session in 26 of the 37 States that have compulsory attendance laws, and in 3 additional States this requirement is made in the case of all or certain classes of cities.

Coeducation.—A brief but compendious statement of the present status of coeducation of the sexes in the United States and in a number of foreign countries is given in the chapter under consideration. It appears that 95 per cent of all public secondary pupils in the United States are enrolled in mixed schools, but only 40 per cent of all private secondary pupils. As to higher education, 63 per cent of all

undergraduates and 60 per cent of women undergraduates are in coeducational institutions.

City teachers in Connecticut.—The chapter contains a report on the status of city teachers in Connecticut, by Supt. William P. Kelly, of Meriden, Conn., secretary of the Connecticut Association of School Superintendents. The report calls attention to the very small proportion of the teachers who are engaged in systematic study, and discusses the appointment, pensions, and office tenure of teachers.

Summer camps for boys.—An interesting movement for the betterment of the welfare of children is found in the establishment of summer camps. A statement respecting the purposes and functions of camps for boys is found in the report of the secretary of the Fourth Conference of Summer Camps for Boys, an abstract of which is given in this chapter. The report includes a partial list of associations conducting camps, 209 in number, with a membership of 14,436.

Gifts for education.—In addition to the benefactions to educational institutions included in the statistical tables of Vol. 2, mention may be made of the gift of $32,000,000 by Mr. J. D. Rockefeller to the general education board, $1,000,000 by Miss Anna T. Jeanes for the benefit of rural schools for negroes, $10,000,000 by Mrs. Russell Sage for social betterment, and $6,000,000 by Mr. Andrew Carnegie to the Carnegie Institute, Pittsburg, Pa.

Teachers' pensions.—During the school year 1906–7, the States of Illinois, Indiana, Pennsylvania, and Rhode Island enacted laws for the granting of pensions to public school teachers. Statements respecting these laws and the pension systems in vogue in other States and in Europe are given in the chapter.

Other topics presented are Industrial Education in City Schools, Medical Inspection of School Children, High School Fraternities, Education of the Deaf in Day Schools, Higher Commercial Education in Europe, the Imperial Rescript on Education in Japan, Compulsory Education in Japan, and the annual statistics of elementary education in foreign countries.

EDUCATIONAL PERIODICALS, ETC.

In Chapter XVII appears the usual list of educational periodicals; and in the chapter following, an educational directory. Great care has been taken to render the information conveyed in these chapters as accurate as possible, yet mistakes will doubtless still be found in them. The list of periodicals names only those that are on file in the library of the Bureau of Education and other libraries in the District of Columbia. This list will be supplemented in the next annual report by a list of school, college, and university magazines currently received in the libraries of the District. The directory has been corrected as far as possible down to March 1, 1908.

RECOMMENDATIONS.

In several of the States an effort is making to secure a more effective supervision of rural schools. I am convinced that such improvement is one of the most urgent of our present educational needs. It is accordingly recommended to the serious consideration of State and Territorial legislatures and of those concerned in the educational administration of States and Territories.

The usefulness of supervision in school affairs is generally recognized in our city school systems. It took many years to learn its value, even for the cities. But that point is now secure. The men of affairs who are found on our city boards of education would no sooner expect the schools to be made efficient without adequate supervision than they would expect any great industry to succeed without thorough organization. Broadly speaking, from 6 to 12 per cent of the expenditures for city schools, exclusive of permanent improvements, is now commonly devoted to the payment of salaries of supervisory officers. The principle back of such expenditures is the very simple one, that competent supervision adds to the efficiency of every person working under such supervision. This is true of schools and industries alike. When a large number of persons has come to be employed in work of the same kind within a comparatively small area, there is more to be gained by the addition of a supervisory officer than can be gained at the same expense by the addition of one or more workers doing work of the same kind as that which all of the others are doing. And as long as supervision is not overdone, the money spent upon it serves to secure and to increase the returns upon all expenditures for the employment of individual workers. This is all obvious enough. But it is by no means easy, as experience shows, to carry this general principle over into the actual management of schools in our rural districts.

There have been numerous movements directed to the improvement of rural schools. In the early eighties of the nineteenth century some of these movements bore especially upon the strengthening of county supervision, and gains were made at that time which have not been lost to the present day. Even before that decade, in New England good beginnings had been made in supervision with the township for its unit. Supervision by groups of townships has followed. The historic report of the committee of twelve on rural schools, presented to the National Council of Education in 1897, offered strong recommendations touching the work of rural school supervisors. The trend of recent legislation upon this subject may be seen in important enactments in the States of Maine (1905), Vermont (1906), and Wisconsin (1905). The selected list of publications which is appended to this introduction will give some indication of discussions in this field covering nearly a quarter of a century.

It must be assumed in any consideration of such supervision that only competent supervisors are to be chosen. Where adequate provision has not been made for limiting employment in supervisory offices to persons of proved competency, this is one of the first points to be guarded. But, passing over this question, there are two additional points to which I would respectfully invite attention. These are the provision of supervisors in sufficient number to meet the actual needs of the schools, and the union of general supervision with the work of supervisors in special subjects.

In speaking of the number of supervisors needed, it will be well to consider only those who spend practically all of their time in the schools. In this reckoning a county superintendent of schools who must give half of his time while schools are in session to his office duties, and has only the remaining half for school visitation, will be counted for only half of one supervising officer.

There is no settled agreement as to the number of teachers who may be properly supervised by one inspector. The committee of twelve declared that "as a general rule * * * every rural school ought to be visited at least once in two months," and added that "an ideal system of supervision would give 1 supervisor from 50 to 75 teachers to supervise." The Vermont law of 1906 for the establishment of unions of towns for supervisory purposes relates to "neighboring towns having an aggregate of not more than 70 nor less than 30 schools." The Maine law of 1905 sets the corresponding limits at "not less than 20 nor more than 50 schools." The numbers should indeed vary according to the distance of the schools one from another, the proportion of young or untrained teachers employed, the frequency of change in the teaching force, the settled or changing character of the prescribed course and methods of instruction. Generally speaking, however, I think it desirable that the average time available for the actual visitation of each school by a supervisory officer should be not less than one half-day for every month that the school is in session, and one full day a month would be far better. For a backward or a rapidly developing system of schools, with many new and only partially trained teachers each year, this would be an extremely conservative estimate. Stated in other terms, it would mean the employment of one supervisory officer for from 20 to 40 teachers, such officer spending all of the school time in the schools.

If so much of supervision as is here proposed is to be accomplished, it will be necessary either to make the supervisory districts comparatively small or to organize groups of supervisors in districts of larger size. There are advantages in both methods, and the one to be adopted in any given State must depend upon the prevailing system of local government in that State. In New England the system of supervision by small units—towns or groups of towns—is firmly

established. In the South and West the county is found to be the generally recognized unit; and there are various intermediate and combined systems which offer advantages of their own.

The county system is widely adopted in different parts of this country. Where this system accords with the governmental traditions of a Commonwealth, it presents possibilities in the way of educational administration which, in my opinion, have not yet been fully realized. The most of our counties are too large for any close inspection of all of the schools each year by the county superintendent. In many instances, too, the county superintendent is not provided with sufficient clerical assistance and must accordingly give to office routine much time that is needed for the schools. Even under these limitations many of our county superintendents have done a work of great value. But remedies should be found for such hampering restrictions, and two of these remedies are obvious at once: The first is the employment of a sufficient clerical force in the superintendent's office, and the second is the employment of deputy or assistant superintendents for the express purpose of school visitation, very much as supervisory assistants are employed in city systems of schools.

The suggestions offered above, to which I would invite particular attention, bring us to a consideration of the employment, for country schools, of supervisors of special subjects. Under a system of township supervision such special supervisors may best be employed by the State, either for the State as a whole or for districts within the State. Under a county system it should be possible in any of the larger counties to employ one or more supervisors of special subjects as members of the county supervisory force. A union of smaller counties for the employment of special supervisors might be found advisable.

In the cities many difficulties have appeared in the adjustment of the service of special supervisors to the general work of supervision. Such difficulties will undoubtedly reappear in the supervision of rural schools. They are inherent in the educational situation of the present time. But real progress in education is to be achieved through working adjustments between the views and purposes of competent specialists and of more general supervisory officers. Both are necessary and cooperation between them is necessary. By a bringing together of these two, the work of the specialist and the work of the general educator, the instruction in our city schools has been greatly enlarged and enriched. A similar advantage is to be sought most earnestly for the benefit of our rural schools.

While this reference to special supervisors points to such provision for the subjects of drawing, music, and other branches in which special supervisors are employed in city schools, it points also to provision for a group of subjects of the greatest interest to rural com-

munities. The effort which is now making to introduce instruction in agriculture into our district schools may mean the addition of new subjects to the school curriculum, but it means a great deal more. It looks to such remaking of the form and spirit of rural education, as shall bring country life into vital connection with school life. If special supervision is needed when a new subject is added to the school curriculum, it is doubly needed when the new addition is so broad in its content and in its influence as this new group of subjects is intended to be. I think it is not too much to say that an extension and improvement of country school supervision is imperative if the new movements in agricultural education are to be made altogether successful.

The question of adequate school supervision, accordingly, is proposed for the consideration not only of teachers and school officers, but of legislators and of farmers and of all who are concerned with the making of better conditions of living and of life in all our rural communities. The fact is not to be concealed that the carrying out of such a programme as is sketched in these paragraphs will involve an increase in expenditures for education. But so much of increase, at least, is urgently needed. Already in some of the States the added cost is borne by the State at large in cooperation with the local districts concerned. This arrangement does not lessen the cost for the State as a whole, but it does equalize the burden as between the richer and the poorer localities. It is not unlikely that such an arrangement may be found practicable in other States.

All of which is respectfully submitted.

ELMER ELLSWORTH BROWN,
Commissioner.

The SECRETARY OF THE INTERIOR.

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CHAPTER I.

THE WORK OF THE BUREAU OF EDUCATION.

The United States Bureau of Education was originally established as an independent department by an act of Congress[a] approved March 2, 1867. The bill had been introduced into the House of Representatives in 1866 by Gen. James A. Garfield, accompanied by a memorial from the National Association of State and City School Superintendents, which strongly urged the creation of such a governmental agency. The Department of Education continued as an independent department until July 1, 1869, when, according to a provision contained in one of the annual appropriation acts, approved July 20, 1868,[b] it became an office or bureau in the Department of the Interior. During its existence of a little more than forty years, five commissioners of education have served as its chief, viz, Henry Barnard, March 14, 1867, to March 15, 1870; John Eaton, March 16, 1870, to August 5, 1886; Nathaniel H. R. Dawson, August 6, 1886, to September 3, 1889; William T. Harris, September 12, 1889, to June 30, 1906; and the present incumbent, July 1, 1906, to the present time.

PURPOSE.

The purpose and duties of the Bureau, as defined in the act establishing it, are "to collect statistics and facts showing the condition and progress of education in the several States and Territories, and to diffuse such information respecting the organization and management of schools and school systems, and methods of teaching, as shall aid the people of the United States in the establishment and maintenance of efficient school systems, and otherwise promote the cause of education throughout the country." The act provides further that "the Commissioner of Education shall present annually to Congress a report embodying the results of his investigations and labors, together with a statement of such facts and recommendations as will, in his judgment, subserve the purpose for which the office is established." In addition to the duties prescribed in the act of Congress, the Bureau, under the direction of the Secretary of the Interior, has charge of the education of the native children of Alaska and of the management of the Government reindeer in Alaska, and performs the duties devolved upon the Secretary of the Interior in connection with the colleges of

[a] See p. 32. [b] Ibid.

agriculture and the mechanic arts established and endowed under acts of Congress approved July 2, 1862, August 30, 1890, and March 4, 1907.

In general, then, the purpose of the Bureau is to provide an active center of educational influence and information for the whole country, and to perform such administrative duties of an educational character as may from time to time be assigned to it.

In the performance of the duties devolved upon the Bureau by the organic act, it collects annually statistics and other information relative to State school systems, city school systems, and all classes of educational institutions in the United States, as well as information relative to educational systems in foreign countries, all of which is disseminated by means of the Annual Report of the Commissioner of Education and other publications and by correspondence.

PUBLICATIONS.[a]

The publications of the Bureau consist of (1) the Annual Report, (2) Special reports, (3) Circulars of information, (4) Bulletin of the Bureau of Education.

The Annual Report, which has been published regularly since the establishment of the Bureau, is the chief medium for the dissemination of the statistics and other educational information periodically collected by the Bureau, and it has assumed a fairly constant form. It is devoted very largely to setting forth in detailed statistical tables the condition of the educational systems and institutions in the several States and Territories of the Union, together with chapters containing more general information respecting educational movements in our own land and in foreign lands. The action of Congress June 30, 1906, in limiting to $20,000 the funds available in any one year for printing and binding the Annual Report, has made it obligatory to reduce the size of the report from about 2,600 pages to practically one-half that number; it is necessary now, therefore, to omit much matter of an historical nature which formerly found a place in the report, and to limit its contents for the most part to current information.

Special reports have been published in the past at irregular intervals, on subjects of timely interest.

Circulars of information were frequently issued in the past, treating important questions of educational history and methods. The series of histories of education in the several States appeared as circulars of information. The latest number issued, the History of Higher Education in Maine, was published in 1903.

The Bulletin of the Bureau of Education is authorized by an act of Congress approved May 28, 1896,[b] and is intended to present matters

[a] For complete list of publications see No. 2 of the Bulletin of the Bureau for 1908.

[b] See p. 33.

of current educational interest. The issues of the Bulletin are to appear at irregular intervals, as special need may arise and suitable matter may be ready to put forth. The first number was issued in the fall of 1906, and was followed during that year by two additional numbers. In 1907, four numbers were issued. Some of the issues are to appear in revised form annually or biennially, and others are to embody the results of special investigations.

ORGANIZATION.

For purposes of administration the office force is divided into five divisions, namely, Division of Correspondence and Records, Statistical Division, Division of Editorial Work, Library Division, and Alaska Division.

DIVISION OF CORRESPONDENCE AND RECORDS.

The Division of Correspondence and Records opens, indexes, numbers, and files the letters received, and indexes the letters sent. It also opens and distributes to the appropriate divisions the many reports and publications received from educational systems and institutions.

STATISTICAL DIVISION.

The Statistical Division has charge of the collection and preparation for the Annual Report and for other publications of the Bureau of statistical information from State and city school systems; universities, colleges, and technological schools; professional, normal, and secondary schools; manual and industrial training schools; commercial and business schools; schools for nurses; schools for the colored race; reform schools; and schools for the defective classes. The work of the division is restricted to educational matters in the United States.

DIVISION OF EDITORIAL WORK.

The Division of Editorial Work prepares for the printer all manuscript for the Annual Report and for the other publications of the Bureau, has charge of the proof reading, and collects and compiles information in regard to education in foreign countries.

LIBRARY DIVISION.

The Library Division has charge of the library of the Bureau, which is already a very valuable collection. The library is in course of reorganization, and it is intended to make of it a special collection relating to education. In certain portions of its field, notably in the official publications of education departments, and of universities, colleges, and schools, American and foreign, it is by far the leading collection in this country. As such it can be made of incalculable value to students of education, and to legislative bodies and administrative officers having to do with educational affairs. It is intended

to make the library increasingly useful to such persons by the development of its bibliographical service, and by making provision for the accommodation of graduate students as authorized by Congress.[a] Considerable work in that direction has already been accomplished, but it is desired to extend the service very largely, so that references to the numerous subjects about which information is frequently requested may be readily supplied.

ALASKA DIVISION.

The Alaska Division has charge of the schools for natives of Alaska and of the Government reindeer in Alaska. During the fiscal year ended June 30, 1907, the Bureau maintained 52 public schools for natives in Alaska, with a total enrollment of 2,639.

Plans are making for progressive modifications in the methods employed in these schools, with a view to rendering the natives better able to care for themselves. Beginnings have been made in industrial training in some of the schools, as well as in connection with the reindeer herds. It is proposed that the natives be instructed in the best methods of catching and curing fish, in caring for all parts of the walrus and whale that are merchantable, in the handling of wooden boats, in the tanning and preparing of skins, in coal mining, and in the elements of agriculture. Furthermore, it is proposed to aid them in acquiring the best methods of preserving that portion of the products which they will need for themselves. and in the best methods of marketing that which they sell.

A new system of industrial education was inaugurated with the introduction of domestic reindeer into Alaska, beginning in 1891. Under this system the natives of Alaska are trained in the arts of herding, harnessing, and driving reindeer. By this means they are fitted for a new industry, which has been introduced for the express purpose of enabling them to render a unique service to the white man, and to resist the destructive influences of the new environment which the white man has produced.

The introduction of reindeer into Alaska has been carried on by the Bureau of Education, through its Alaska Division, under the general direction of the Secretary of the Interior, by means of annual Congressional appropriations beginning in 1893.

There were in July, 1907, about 15,000 reindeer in Alaska, the several owners being the United States Government, a number of Eskimo and Lapland herders, and the mission societies of several churches.

A code of rules and regulations for the Alaska reindeer service has now been prepared. The purpose underlying these rules and regulations is the general distribution of reindeer among the natives of Alaska as rapidly as the natives can be trained to care for and use the deer; and the establishment of the reindeer enterprise upon a self-

[a] See pp. 33-4.

supporting basis as far as the conditions of the market for reindeer products will permit. Under the present plan it is possible for natives to acquire deer by purchase as well as by service as apprentices at reindeer stations, on condition that the purchaser make proper provision for the care of his reindeer.

AGRICULTURAL AND MECHANICAL COLLEGES.

By an act of Congress approved July 2, 1862 (the first Morrill Act), there were granted to each State 30,000 acres of land for each Senator and Representative in Congress to which such State was entitled, for the establishment of one or more institutions where the leading object should be to teach such branches of learning as are related to agriculture and the mechanic arts. Under the provisions of this act, there have been granted by the Federal Government 10,320,843 acres of land, from the sale of which there has been realized the sum of $12,744,467, with land valued at $4,858,111 remaining unsold.

By an act of Congress approved August 30, 1890 (the second Morrill Act), a continuing appropriation was made for "the more complete endowment and support of the colleges for the benefit of agriculture and the mechanic arts established under the provisions of an act of Congress approved July 2, 1862." The said act of August 30, 1890, appropriated to each State and Territory for the year ending June 30, 1890, the sum of $15,000, and an annual increase thereafter for ten years by an additional sum of $1,000 over the amount for the preceding year, until the appropriation should reach the sum of $25,000, which should then be the amount to be received annually by each State and Territory.

Under this act there has been paid to the several States from the passage of the act to and including the installment for the year ended June 30, 1907, the sum of $18,802,000.

Under the "Nelson amendment" incorporated in an act of Congress approved March 4, 1907 (34 Stat. L., 1281), the annual appropriations for colleges of agriculture and the mechanic arts provided by the act of August 30, 1890, were increased. The act appropriates for the year ending June 30, 1908, to each State and Territory the sum of $5,000 in addition to the amount appropriated by the act of August 30, 1890, and an annual increase of the amount of such appropriation thereafter for four years by an additional sum of $5,000 over the preceding year, the annual sum to be paid thereafter to each State and Territory being $50,000.

There are now in the several States and Territories 66 institutions receiving aid under these acts, 16 of the States having separate institutions for the instruction of white and colored students, respectively.

The administration of these acts was committed by Congress to the Secretary of the Interior. The annual payments under the acts of

August 30, 1890, and March 4, 1907, are made on the certification of the Secretary of the Interior, which is based on the proper expenditure of preceding appropriations. All of the reports required to be made by the act are collected and passed upon by the Commissioner of Education, upon whose recommendation is based the action of the Secretary.

APPENDIX.

AN ACT TO ESTABLISH A DEPARTMENT OF EDUCATION.

(Approved March 2, 1867.)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there shall be established, at the city of Washington, a department of education, for the purpose of collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories, and of diffusing such information respecting the organization and management of schools and school systems, and methods of teaching, as shall aid the people of the United States in the establishment and maintenance of efficient school systems, and otherwise promote the cause of education throughout the country.

SEC. 2. *And be it further enacted*, That there shall be appointed by the President, by and with the advice and consent of the Senate, a commissioner of education, who shall be intrusted with the management of the department herein established, and who shall receive a salary of four thousand dollars per annum, and who shall have authority to appoint one chief clerk of his department, who shall receive a salary of two thousand dollars per annum, one clerk who shall receive a salary of eighteen hundred dollars per annum, and one clerk who shall receive a salary of sixteen hundred dollars per annum, which said clerks shall be subject to the appointing and removing power of the commissioner of education.

SEC. 3. *And be it further enacted*, That it shall be the duty of the commissioner of education to present annually to Congress a report embodying the results of his investigations and labors, together with a statement of such facts and recommendations as will, in his judgment, subserve the purpose for which this department is established. In the first report made by the commissioner of education under this act, there shall be presented a statement of the several grants of land made by Congress to promote education, and the manner in which these several trusts have been managed, the amount of funds arising therefrom, and the annual proceeds of the same, as far as the same can be determined.

SEC. 4. *And be it further enacted*, That the commissioner of public buildings is hereby authorized and directed to furnish proper offices for the use of the department herein established.

LAW CHANGING THE DEPARTMENT OF EDUCATION TO BUREAU OF EDUCATION.

(Approved July 20, 1868.)

Provided, That from and after the thirtieth day of June, eighteen hundred and sixty-nine, the department of education shall cease, and there shall be established and attached to the Department of the Interior an office to be denominated the office of education, the chief officer of which shall be the Commissioner of Education, at a salary per annum of three thousand dollars, who shall, under the direction of the Secretary of the Interior, discharge all such duties, and superintend, execute, and perform all such acts and things touching and respecting the said office of education as are devolved by law upon said Commissioner of Education.

LAW AUTHORIZING THE PUBLICATION OF THE BULLETIN OF THE BUREAU OF EDUCATION.

(Approved May 28, 1896.)

The Commissioner of Education is hereby authorized to prepare and publish a bulletin of the Bureau of Education as to the condition of higher education, technical and industrial education, facts as to compulsory attendance in the schools, and such other educational topics in the several States of the Union and in foreign countries as may be deemed of value to the educational interests of the States, and there shall be printed one edition of not exceeding twelve thousand five hundred copies of each issue of said bulletin for distribution by the Bureau of Education, the expense of printing and binding such bulletin to be charged to the allotment for printing and binding for the Department of the Interior.

FACILITIES FOR STUDY AND RESEARCH IN GOVERNMENT DEPARTMENTS AND BUREAUS.

Joint resolution to encourage the establishment and endowment of institutions of learning at the national capital by defining the policy of the Government with reference to the use of its literary and scientific collections by students.

(Approved April 12, 1892.)

Whereas large collections illustrative of the various arts and sciences and facilitating literary and scientific research have been accumulated by the action of Congress through a series of years at the national capital; and

Whereas it was the original purpose of the Government thereby to promote research and the diffusion of knowledge, and is now the settled policy and present practice of those charged with the care of these collections specially to encourage students who devote their time to the investigation and study of any branch of knowledge by allowing to them all proper use thereof; and

Whereas it is represented that the enumeration of these facilities and the formal statement of this policy will encourage the establishment and endowment of institutions of learning at the seat of Government, and promote the work of education by attracting students to avail themselves of the advantages aforesaid under the direction of competent instructors: Therefore,

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the facilities for research and illustration in the following and any other governmental collections now existing or hereafter to be established in the city of Washington for the promotion of knowledge shall be accessible, under such rules and restrictions as the officers in charge of each collection may prescribe, subject to such authority as is now or may hereafter be permitted by law, to the scientific investigators and to students of any institution of higher education now incorporated or hereafter to be incorporated under the laws of Congress or of the District of Columbia, to wit:

One. Of the Library of Congress.
Two. Of the National Museum.
Three. Of the Patent Office.
Four. Of the Bureau of Education.
Five. Of the Bureau of Ethnology.
Six. Of the Army Medical Museum.
Seven. Of the Department of Agriculture.
Eight. Of the Fish Commission.
Nine. Of the Botanic Gardens.
Ten. Of the Coast and Geodetic Survey.
Eleven. Of the Geological Survey.
Twelve. Of the Naval Observatory.

From an act making appropriations to supply deficiencies in the appropriations for the fiscal year ended June 30, 1901, and for prior years, and for other purposes, approved March 3, 1901. (Supplement to the Revised Statutes of the United States, vol. 2, 1892–1901, p. 1534.)

(8) That facilities for study and research in the Government Departments, the Library of Congress, the National Museum, the Zoological Park, the Bureau of Ethnology, the Fish Commission, the Botanic Gardens, and similar institutions hereafter established shall be afforded to scientific investigators and to duly qualified individuals, students, and graduates of institutions of learning in the several States and Territories, as well as in the District of Columbia, under such rules and restrictions as the heads of the Departments and Bureaus mentioned may prescribe.

EDUCATION IN ALASKA.

An act providing a civil government for Alaska.

(Approved May 17, 1884.)

SEC. 13. That the Secretary of the Interior shall make needful and proper provision for the education of the children of school age in the Territory of Alaska, without reference to race, until such time as permanent provision shall be made for the same, and the sum of twenty-five thousand dollars, or so much thereof as may be necessary, is hereby appropriated for this purpose. (1 Supplement R. S., 1874–1891, p. 435.)

Letter to the Commissioner of Education.

DEPARTMENT OF THE INTERIOR,
Washington, March 2, 1885.

The COMMISSIONER OF EDUCATION.

SIR: Section 13, of the act providing a civil government for Alaska, devolves upon the Secretary of the Interior the duty of making needful and proper provision for the education of children of school age in that Territory until permanent provision shall be made for the same. The nature of the duties assigned by section 516 of the Revised Statutes to the Commissioner of Education would seem to point him out as the proper officer through whom the purpose of Congress should be carried into execution. I have to request therefore that you prepare a plan of operation and initiate such steps as are necessary and proper for carrying into effect the legislation above referred to, reporting the results of the same as may be hereafter directed by the Secretary of the Interior or whenever, in your judgment, there may be occasion for so doing.

Very respectfully, etc.,

H. M. TELLER, *Secretary.*

An act making further provision for a civil government for Alaska, and for other purposes.

(Approved June 6, 1900.)

SEC. 202. In addition to the officers heretofore provided by this act, there shall be elected a school board of three directors, who shall have the exclusive supervision, management, and control of the public schools and school property within said corporation [any community having 300 permanent inhabitants may incorporate], and shall be elected in the same manner and for the same term as the council. (2 Supp. Rev. Stat., 1892–1901, p. 1397.)

An act to provide for the construction and maintenance of roads, the establishment and maintenance of schools, and the care and support of insane persons in the district of Alaska, and for other purposes.

(Approved January 27, 1905.)

SEC. 3. That the governor of the district of Alaska shall be ex-officio superintendent of public instruction in said district, and as such shall have supervision and direction of the public schools in said district, and shall prescribe rules and regulations for the examination and qualification of teachers, and shall make an annual report of the condition of the schools in the district to the Secretary of the Interior.

Sections 4 and 5 provide for the establishment and maintenance under local control of schools in Alaska.

SEC. 7. That the schools specified and provided for in this act shall be devoted to the education of white children and children of mixed blood who lead a civilized life. The education of the Eskimos and Indians in the district of Alaska shall remain under the direction and control of the Secretary of the Interior, and schools for and among the Eskimos and Indians of Alaska shall be provided for by an annual appropriation, and the Eskimo and Indian children of Alaska shall have the same right to be admitted to any Indian boarding school as the Indian children in the States or Territories of the United States. (33 Stats., 616–619.)

An act making appropriations for sundry civil expenses of the Government for the fiscal year ended June 30, 1908, and for other purposes.

(Approved March 4, 1907.)

That all expenditure of money appropriated herein for school purposes in Alaska shall be under the supervision and direction of the Commissioner of Education and in conformity with such conditions, rules, and regulations as to conduct and methods of instruction and expenditure of money as may from time to time be recommended by him and approved by the Secretary of the Interior. (34 Stats., 1338.)

COST OF MAINTENANCE OF BUREAU OF EDUCATION.

PART I.—*Specific appropriations for Bureau of Education.*

Year.	Salaries.	Library.	Distributing documents.	Collecting statistics.	Rent.	Total.
	1	2	3	4	5	6
1867 and 1868	$12,592	.....	.....	.....	.....	$12,592
1869	9,400	.....	.....	.....	.....	9,400
1870	5,400	.....	.....	.....	.....	5,400
1871	8,640	$1,000	.....	$3,000	.....	12,640
1872	10,240	1,000	.....	13,000	.....	24,240
1873	17,640	1,675	.....	13,000	.....	32,315
1874	17,640	1,675	.....	13,000	.....	32,315
1875	18,360	1,675	.....	11,000	.....	31,035
1876	18,360	1,675	.....	11,000	.....	31,035
1877	18,160	1,675	.....	8,000	.....	27,835
1878	17,440	1,675	$1,500	8,000	.....	28,615
1879	17,320	1,675	2,500	8,000	.....	29,495
1880	17,320	1,675	1,000	7,000	.....	26,995
1881	22,180	1,675	5,000	15,000	$7,200	51,055
1882	25,380	1,675	6,000	15,000	6,000	54,055
1883	44,580	1,675	2,000	2,200	6,000	56,455
1884	44,580	1,675	2,000	2,200	6,000	56,455
1885	44,580	1,175	2,000	2,200	6,000	55,955
1886	45,420	1,175	3,000	3,000	6,000	58,595
1887	45,420	1,175	2,500	3,000	4,000	56,095
1888	45,420	1,000	2,500	2,000	4,000	54,920
1889	45,420	1,000	2,000	2,500	4,000	54,920
1890	45,420	1,000	2,000	2,500	4,000	54,920
1891	47,220	1,000	2,000	3,000	4,000	57,220
1892	48,620	1,000	2,000	3,000	4,000	58,620
1893	48,820	750	2,000	2,000	4,000	57,570
1894	48,820	500	1,500	1,500	4,000	56,320
1895	48,820	500	2,500	2,500	4,000	58,320
1896	51,820	500	2,500	2,500	4,000	61,320
1897	52,020	500	2,500	2,500	4,000	61,520
1898	52,020	500	2,500	2,500	4,000	61,520
1899	52,020	250	2,500	2,500	4,000	61,270
1900	52,020	250	2,500	2,500	4,000	61,270
1901	53,620	250	2,500	2,500	4,000	62,870
1902	54,120	250	2,500	2,500	4,000	63,370
1903	54,740	250	2,500	2,500	4,000	63,990
1904	52,940	250	2,500	2,500	4,000	62,190
1905	52,940	250	2,500	2,500	4,000	62,190
1906	53,140	250	2,500	2,500	4,000	62,390
1907	54,940	250	2,500	2,500	4,000	64,190
1908	55,500	250	2,500	4,000	4,000	66,250
1909	56,500	500	2,500	4,000	4,000	67,500

PART II.—*Other appropriations, expenditures from appropriations for the Department of the Interior, and summary of appropriations and expenditures.*

Year.	Printing of annual reports.[a]	Other appropriations and expenditures from departmental appropriations.[b]	Education and reindeer in Alaska.	Grand totals.	
				Total of appropriations for all purposes and expenditures from departmental appropriations, including those for Alaska.[c]	Total of appropriations for all purposes and expenditures from departmental appropriations, not including those for Alaska.[d]
	7	8	9	10	11
1867 and 1868	$84	$6,000	.....	$18,676	$18,676
1869	2,673	10,600	.....	22,673	22,673
1870	2,550	600	.....	8,550	8,550
1871	5,224	1,860	.....	19,724	19,724
1872	2,955	2,260	.....	29,455	29,455
1873	4,257	2,535	.....	39,107	39,107
1874	1,468	2,535	.....	36,318	36,318
1875	3,720	4,535	.....	39,290	39,290
1876	5,864	4,535	.....	41,434	41,434
1877	2,000	3,225	.....	33,060	33,060
1878	3,900	1,725	.....	34,240	34,240
1879	.....	1,725	.....	31,220	31,220
1880	6,671	1,725	.....	35,391	35,391
1881	8,647	1,725	.....	61,427	61,427
1882	9,647	2,100	.....	65,802	65,802
1883	11,665	2,100	.....	70,220	70,220
1884	10,061	2,777	.....	69,293	69,293
1885	17,294	2,990	$25,000	101,239	76,239
1886	15,664	2,025	.....	76,284	76,284
1887	15,350	2,732	15,000	89,177	74,177
1888	10,566	1,326	25,000	91,812	66,812
1889	14,556	1,581	40,000	111,057	71,057
1890	15,862	21,150	50,000	141,932	91,932
1891	.....	8,231	50,000	115,451	65,451
1892	24,111	36,920	50,000	169,651	119,651
1893	.....	16,274	40,000	113,844	73,844
1894	22,258	28,903	36,000	143,481	107,481
1895	38,730	15,864	37,500	150,414	112,914
1896	25,748	4,348	37,500	128,916	91,416
1897	61,454	3,971	42,000	168,945	126,945
1898	30,976	4,733	42,000	139,229	97,229
1899	32,822	8,279	42,500	144,871	102,371
1900	32,992	6,918	55,000	156,180	101,180
1901	33,444	9,197	55,000	160,511	105,511
1902	34,466	9,741	60,882	168,459	107,577
1903	31,280	7,731	44,742	147,743	103,001
1904	31,800	7,076	128,377	229,443	101,066
1905	32,740	5,011	170,153	270,094	99,941
1906	34,000	3,794	65,000	165,184	100,184
1907	20,000	7,898	109,000	201,088	92,088
1908	40,000	12,105	209,000	327,355	118,355
1909	20,000	.....	215,000	.....	.....

[a] The amounts in this column are the sums actually expended during the several years for printing the annual report. Two reports were issued in each of two years, and the appropriation for 1908 includes provision for printing two annual reports, those for 1906 and 1907. In this and the succeeding columns no account is made of fractional parts of a dollar.

[b] Includes expenditures for stationery and contingent expenses, and since 1890 expenditures for miscellaneous printing and binding and for postage.

[c] Sum of the items included in columns 6, 7, 8, and 9.

[d] Sum of the items included in columns 6, 7, and 8.

CHAPTER II.

A LIST OF THE WRITINGS OF WILLIAM TORREY HARRIS,

CHRONOLOGICALLY ARRANGED, WITH SUBJECT INDEX.

By Henry Ridgely Evans.

BIOGRAPHICAL NOTE.

"William Torrey Harris, educator, born North Killingly, Conn., 10th September, 1835. Studied at Phillips Academy, Andover, Mass., and at Yale. * * * Removing to St. Louis, Mo., he was a teacher in that city from 1858 to 1867, when he became its superintendent of schools. His thirteen annual school reports, 1868–1880, gained him wide reputation as an educator, and brought him the honorary titles of 'Officer of the academy' and 'Officer of public instruction,' from the French Government. He founded the Journal of Speculative Philosophy, 1867, of which, in 1890, he had edited [and published], with numerous contributions of his own, twenty-one volumes. Was assistant editor of Johnson's Encyclopædia, writing forty articles in the department of philosophy and psychology. In 1880 Doctor Harris resigned his position as superintendent and removed to Concord, Mass., where, with Mr. Amos Bronson Alcott [F. B. Sanborn, and S. H. Emery], he was active in founding the Concord School of Philosophy, and was one of the most frequent lecturers at its sessions. Was connected with the American Social Science Association for fifteen years, writing many papers for the annual meetings. A constant contributor of articles on philosophy, education, and art to The North American Review, The Forum, Journal of Social Science, The Western, and other leading reviews. He was the representative of the United States Bureau of Education at the Brussels International Congress of Educators, 1880, and in 1889 was appointed by President Harrison United States Commissioner of Education."—A library of American literature * * * compiled and edited by E. C. Stedman and Ellen M. Hutchinson. New York, C. L. Webster & Co., 1890, v. 11, pp. 522–523.

Doctor Harris was United States Commissioner of Education from September 12, 1889, to June 30, 1906, when he resigned to devote himself to literary work. He is editor of Appleton's International Education Series and Webster's International Dictionary of the English Language. He received the degree of M. A. from Yale University

in 1869 and that of LL.D. in 1895. The University of Missouri conferred the degree of LL.D. in 1870, the University of Pennsylvania in 1894, and Princeton in 1896. He received the degree of Ph. D. from Brown University in 1893, and the University of Jena in 1899. The Carnegie Foundation for the Advancement of Teaching on May 26, 1906, conferred upon him "as the first man to whom such recognition for meritorious service is given, the highest retiring allowance which our rules will allow, an annual income of $3,000."

LIST OF WRITINGS.

1866.

1. Notes on Raphael's "Transfiguration." *Journal of speculative philosophy, 1: 53–57, 1867.*

   Read before the St. Louis art society, in November 1866.

2. St. Louis. Board of education. Annual reports. St. Louis, 1866–67—1879–80. Illus., plates, plans. 8°.

   Dr. Harris was Superintendent of public schools of the city of St. Louis from May, 1868, to May, 1880, and Assistant superintendent from February 1866, to May, 1868. The report for 1866–67 was prepared by him with the exception of the history of the St. Louis public schools, which was written by Superintendent Ira Divoll, Dr. Harris' predecessor.

1867.

3. Goethe's theory of colors. *Journal of speculative philosophy, 1: 63–64, 1867.*
4. Herbert Spencer. *Journal of speculative philosophy, 1: 6–22, 1867.*
5. Introduction to philosophy. *Journal of speculative philosophy, 1: 57–60, 116–121, 187–190, 236–240, 1867; 2: 51–55, 176–181, 1868.*
6. The Journal of speculative philosophy. Ed. by Wm. T. Harris. v. 1–22; 1867–Dec., 1893. St. Louis, G. Knapp & co., printers [etc.] 1867–80; New York, D. Appleton and company; [etc., etc.] 1880–93. 22 v. 8°.

   1867–87 pub. quarterly; v. 22, no. 1–2 pub. Jan.–Apr. 1888, no. 3, Sept. 1892, no. 4, Dec., 1893. Index . . . vol. I–XV: v. 15, p. 433–444.

7. The speculative. *Journal of speculative philosophy, 1: 2–6, 1867.*

1868.

8. Analysis of Hegel's phenomenology. *Journal of speculative philosophy, 2: 99–102, 181–187, 1868.*
9. Mr. Divoll and the public school library of St. Louis. By Hermes. *Journal of education, St. Louis, 1: 1–2, September 1868.*
10. Nominalism *versus* realism. *Journal of speculative philosophy, 2: 57–61, 1868.*
11. Pestalozzianism. *In* St. Louis. Board of education. 14th annual report for the year ending August 1, 1868, p. 91–94.
12. Review questions in geography and constitution of the United States. [St. Louis] 1868. 11 p. 8°.

    These questions are made out on Warren's Common school geography.

13. The phenomenology of spirit. *Journal of speculative philosophy, 2: 94–99, 165–171, 229–241, 1868.*

    Translated from the German of G. W. F. Hegel, by W. T. Harris and H. C. Brockmeyer.

14. What is meant by "determined." *Journal of speculative philosophy, 2: 190–191, 1868.*

    The above discussion is a continuation of the article on "Nominalism *vs.* realism," as published in Journal of speculative philosophy, 2: 57–61, 1868.

1869.

15. Course of study. *In* St. Louis. Board of education. 15th annual report for the year ending August 1, 1869, p. 95–116.

    Among the important subjects discussed are Leigh's phonetic system, p. 95–6; Defects of graded schoo lsystems, p. 105; and What a child gains by mastery of course of study, p. 109–114.

16. Educational psychology. By Hermes. *Journal of education, St. Louis, 2: 49, 67, 89, November and December 1869, January 1870.*
17. Elementary school education. *Journal of speculative philosophy, 3: 181–190, 1869.*
18. Hegel's first principle: an exposition of comprehension and idea (Begriff und Idee). Translated from the German of G. W. F. Hegel, and accompanied with an introduction and explanatory notes. St. Louis, 1869. 32 p. 8°.
19. Hegel's first principle. (As introduction to the translation of the "Science of Comprehension") *Journal of speculative philosophy, 3: 344–371, 1869.*
20. Outlines of Hegel's logic. *Journal of speculative philosophy, 3: 257–281, 1869.*

    This compend is translated from Hegel's Philosophical propædeutics, edited by Karl Rosenkranz. 1840.

21. Outlines of Hegel's phenomenology. *Journal of speculative philosophy, 3: 166–174, 1869.*

    Translated from Hegel's Philosophical propædeutics, edited by Karl Rosenkranz. 1840.

22. Text-books—their uses and abuses. *Journal of education, St. Louis, 2: 41–42, November 1869.*
23. The defect in the graded school system. *Western educational review, St. Louis, 1: 1–4, December 1869.*
24. The gyroscope. *Journal of education, St. Louis, 1: 201–202, August 1869.*

    "The explanation of the phenomena exhibited in this piece of mechanism consists in showing how the force of gravity combines with the force in the momentum of the revolving wheel, so as to produce a movement of the whole around the upright standard or support."

25. "The last judgment," as painted by Michel Angelo. *Journal of speculative philosophy, 3: 73–88, 1869.*

    An essay read before the St. Louis art society.

26. The true first principle. *Journal of speculative philosophy, 3: 287–288, 1869.*
27. What shall we study? *Journal of education, St. Louis, 2: 1–3, September 1869.*

—— [St. Louis, 1870] 5 p. 8°. (Popular education document, no. 1.)

Reprinted from Journal of education, St. Louis, 3: 3–4, November 1870.

1870.

28. Book classification. *Journal of speculative philosophy, 4: 114–129, April 1870.*

    The scheme here given was adopted by the Public School Library of St. Louis, in 1870, and is printed in the Catalogue, classified and alphabetical, of the books of the St. Louis Public School Library, St. Louis, 1870, p. iv–xvi. Dr. Harris' system classifies the books of the library under four main divisions: 1. Science; 2. Art and literature; 3. History and geography; 4. General encyclopedias and periodicals, *i. e.* publications which contain miscellaneous matter belonging to classes 1, 2, 3. The 4 main divisions are subdivided into 100 sub-classes, and falling within the latter 254 minor classes. This system was adopted by Mr. Melvil Dewey in his classification of the books of the Amherst College Library in 1876; by the Peoria Mercantile Library, predecessor of the Peoria Public Library, in 1871, with some modifications. Many of its important features were adopted by the Apprentices Library of New York City.

29. Calisthenics. *Western educational review, St. Louis, 1: 197–8, September 1870.*
30. Co-education of the sexes. *In* St. Louis. Board of education. 16th annual report for the year ending August 1, 1870, p. 11–21.
31. Contributions to philosophy. *Journal of speculative philosophy, 4: 279–284, 1870.*
32. District school buildings. *Journal of education, St. Louis, 3–4, September 1870.*
33. English orthography. *Western educational review, St. Louis, 1: 112–114, April 1870.*
34. German-English instruction. *In* St. Louis. Board of education. 16th annual report for the year ending August 1, 1870, p. 120–123.

35. Industrial education. (Polytechnic evening schools.) *In* St. Louis. Board of education. 16th annual report for the year ending August 1, 1870, p. 108–113.
36. Library classification. *In* St. Louis. Board of education. 16th annual report for the year ending August 1, 1870, p. 135–138.
37. Listlessness in the schoolroom. *Western educational review, St. Louis, 1: 277–278, December 1870.*
38. Local supervision of principals. *In* St. Louis. Board of education. 16th annual report for the year ending August 1, 1870, p. 197–201.
39. Manner of conducting recitations. *In* St. Louis. Board of education. 16th annual report for the year ending August 1, 1870, p. 170–181.
40. On the function of illustration. *Western educational review, St. Louis, 1: 84–87, March 1870.*
41. Philosophemes. *Journal of speculative philosophy, 4: 153–155, 1870.*
42. The district school system. *Journal of education, St. Louis, 2: 121–122, March 1870.*
43. The immortality of the soul. *Journal of speculative philosophy, 4: 97–111, 1870.*
44. The phonetic system. *Journal of education, St. Louis, 2: 141–142, April 1870.*
45. The theory of American education. *In* American normal school, and the national teachers' associations. Addresses and journal of proceedings, 1870. Washington, 1871. p. 177–199.

    Reprinted as "The theory of education." Syracuse, N. Y., C. W. Bardeen, 1893. 54 p. 12°. (School-room classics, xv.)

    "Self-determination—the direction of one's own practical endeavor—this I know to be the object aimed at in our schools, not only in the theoretical spheres, but in the sphere of the Will."

46. The value of each branch of study in giving man the mastery of his instrumentalities. *In* St. Louis. Board of education. 16th annual report for the year ending August 1, 1870, p. 164–165.
47. Why patronize the public schools? *Journal of education, St. Louis, 2: 103–104, February 1870.*

1871.

48. Advantages of class recitation. *Western educational review, St. Louis, 2: 3–6, January 1871.*
49. Course of study. *In* St. Louis. Board of education. 17th annual report for the year ending August 1, 1871, p. 173–187.

    Natural science discussed at length.

50. How far may the State provide for the education of her children at public cost? [St. Louis, 1871] 5 p. 8°. Caption title.

    Reprinted from the National education association. Addresses and journal of proceedings, 1871. New York, Washington, 1872. p. 30–37.

51. How to study and how to teach. *Journal of education, St. Louis, 3: 7, January 1871.*
52. In memoriam: Ira Divoll. *In* St. Louis. Board of education. 17th annual report for the year ending August 1, 1871, p. 157–167.
53. Leigh's phonetic system of teaching reading. *Illinois teacher, 17: 377–379, October 1871.*
54. Libraries. *Journal of education, St. Louis, 3: 10, January 1871.*
55. National educational association. *Journal of education, St. Louis, 4: 8, September 1871.*
56. Nature and importance of moral education. *In* St. Louis. Board of education. 17th annual report for the year ending August 1, 1871, p. 21–37.
57. Nature *vs.* human nature, or the spiritual. How man lifts himself by aid of institutions. [Anonymous] *Journal of education, St. Louis, 3: 4–5, January 1871.*
58. Oral instruction. *Journal of education, St. Louis, 3: 9, January 1871.*

59. Philosophy in Europe. *Journal of speculative philosophy, 5: 283–288, July 1871.*
60. Prescription—its province in education. *In* American institute of instruction. Lectures, 1871. p. 127–151.

    Reprinted in Educational foundations, 17: 323–336.

61. Recreation for teachers. *Western educational review, St. Louis, 2: 212–213, July 1871.*
62. Remarks on Leigh's phonetic system. *Journal of education, St. Louis, 3: 8, May 1871.*
63. Speculative philosophy in Italy. *Journal of speculative philosophy, 5: 94–96, January 1871.*
64. The best teacher. *Journal of education, St. Louis, 3: 7, January 1871.*
65. The co-education of the sexes. *Western educational review, St. Louis, 2: 65–67, March 1871.*
66. The concrete and the abstract. *Journal of speculative philosophy, 5: 1–5, January 1871.*
67. The philosophy of Aristotle. *Journal of speculative philosophy, 5: 61–78, 180–192, 251–273, January, April, and July 1871.*

    Translated from G. W. F. Hegel's "History of philosophy."

68. The philosophy of nature. *Journal of speculative philosophy, 5: 274–282, July 1871.*

    A commentary on "The philosophy of Aristotle," translated from the German of G. W. F. Hegel. Journal of speculative philosophy, 5: 61–78, 180–192, 251–273.

69. The prevention of crime. [Anonymous] *Journal of education, St. Louis, 4: 3–4, December 1871.*
70. The theory of American education. *Journal of education, St. Louis, 3: 3–4, January 1871.*
71. Thoughts on school supervision. *Western educational review, St. Louis, 2: 315–316, October 1871.*
72. University education. *Journal of education, St. Louis, 3: 16, March 1871.*

1872.

73. Aristotle's teleology. *In* St. Louis. Board of education. 18th annual report for the year ending August 1, 1872, p. 143.
74. Art instruction. *In* St. Louis. Board of education. 18th annual report for the year ending August 1, 1872, p. 103–108.
75. Bird's eye view of the St. Louis public-school system. *In* St. Louis. Board of education. 18th annual report for the year ending August 1, 1872, p. 160.
76. Civilization an excrescence according to Rousseau. *In* St. Louis. Board of education. 18th annual report for the year ending August 1, 1872, p. 144.
77. Do the correlationists believe in self-movement? *Journal of speculative philosophy, 6: 289–290, October 1872.*
78. German-English instruction. *In* St. Louis. Board of Education. 18th annual report for the year ending August 1, 1872, p. 110–113.
79. German reform in American education. *Western, St. Louis [3], 326–334, September 1872.*

    An essay read before the German-American teachers' association, at Hoboken, August 3, 1872.

80. Grammar as intellectual culture study. *In* St. Louis. Board of education. 18th annual report for the year ending August 1, 1872, p. 144–145.
81. Is positive science nominalism or realism? *Journal of speculative philosophy, 6: 193–197, July 1872.*
82. Intermediate and unclassified schools and corporal punishment. *In* St. Louis. Board of education. 18th annual report for the year ending August 1, 1872, p. 78–79.

83. Mental vs. written arithmetic. *In* St. Louis. Board of education. 18th annual report for the year ending August 1, 1872, p. 144–148.
84. Platonic dialectic. *In* St. Louis. Board of education. 18th annual report for the year ending August 1, 1872, p. 142.
85. Report of committee on basis of percentage of school attendance. [Wm. T. Harris, chairman] *In* National education association. Addresses and journal of proceedings, 1872. Peoria, Ill., 1873. p. 283–284.
86. Review questions in geography. St. Louis, E. K. Woodward [c1872]. 16 p. 8°.
87. Review questions in grammar and reading. And a selected list of words difficult to spell. St. Louis, E. K. Woodward, 1872. 15 p. 8°.
88. Review questions in the history and constitution of the United States. New ed. rev. and enl. St. Louis, E. K. Woodward, 1872. 16 p. 8°.
89. School buildings. *In* St. Louis. Board of education. 18th annual report for the year ending August 1, 1872, p. 87–90.
90. The early withdrawal of pupils from school: its causes and its remedies. *In* National education association. Addresses and journal of proceedings, 1872. Peoria, Ill., 1873, p. 260–271.
91. The education of women. *Western, St. Louis, [3] 128–140, June 1872.*

    A paper read before the Woman's educational association in Boston, April 18, 1872.

92. The high school. *In* St. Louis. Board of education. 18th annual report for the year ending August 1, 1872, p. 42–57.

    Admission to high school and the injury to district schools of too strict examinations for admission to high school discussed, p. 51.

93. The metaphysical calculus. *Journal of speculative philosophy, 6: 1–4, January 1872.*
94. The public school as an institution of civil society and the state. *In* Missouri. Public schools. Seventh annual report of the Superintendent [1872]. Jefferson city, 1873, p. 75–82.
95. The three stages of theoretical culture. *Pennsylvania school journal, 21: 183–186, December 1872.*

1873.

96. Co-education of the sexes. *In* St. Louis. Board of education. 19th annual report for the year ending August 1, 1873, p. 105–120.

    Reprinted in United States. Bureau of education. Report of the Commissioner for the year 1900–01, v. 2, p. 1241–1247.

97. Educational values of the several branches of studies. *In* St. Louis. Board of education. 19th annual report for the year ending August 1, 1873, p. 54–84.

    Reprinted in United States. Bureau of education. Report of the Commissioner for the year 1893–4, v. 1, p. 617–638.

98. Feints and wards. *Western, St. Louis, 1: 299–306, June 1873.*
99. Music as a form of art. *Western, St. Louis, 1: 16–27, January 1873.*
100. Promotion and classification in the St. Louis schools. *In* St. Louis. Board of education. 19th annual report for the year ending August 1, 1873, p. 25–29.
101. The course of study. *In* St. Louis. Board of education. 19th annual report for the year ending August 1, 1873, p. 72–84.
102. The public school library. *In* St. Louis. Board of education. 19th annual report for the year ending August 1, 1873, p. 148–154.

    Dr. Harris discusses under the above head: Participation the essence of spiritual life; The printed page the preservation of the wisdom and experience of the race; Educational psychology in a nutshell.

103. The relation of American colleges to the public schools. *American journal of education, St. Louis, 6: 9, September 1873.*

1874.

104. A national university. *In* National education association. Addresses and journal of proceedings, 1874, p. 78–87.
105. A statement of the theory of education in the United States of America, as approved by many leading educators. Washington, Government printing office, 1874. 22 p. 8°. (U. S. Bureau of Education)

    Prepared by Duane Doty and W. T. Harris. Signatures of 77 educators at end.

106. Church and state. *Western, St. Louis,* [4] *113–136. March 1874.*
107. Class intervals and promotion, *In* St. Louis. Board of education. 20th annual report for the year ending August 1, 1874, p. 121–148.
108. Greek art and the restoration of the Venus of Melos. *Inland monthly, St. Louis, April 1874, p. 337–349.*
109. On Hegel's philosophic method. *Journal of speculative philosophy, 8: 35–48, 91–92, January 1874.*
110. On the relation of education to the individual, to society, and to the state. *Wisconsin journal of education, n. s., 4, 1–11, January 1874.*
111. Participation, the essence of spiritual life. *American journal of education, St. Louis, 7: 3–4, February 1874.*
112. Revolution in course of study. *American journal of education, St. Louis, 7: 3–4, 3, May and June 1874.*
113. School hygiene. *In* St. Louis. Board of education. 20th annual report for the year ending August 1, 1874, p. 105–120.
114. Suspension rather than corporal punishment. *In* St. Louis. Board of education. 20th annual report for the year ending August 1, 1874, p. 200–202.
115. The county superintendent. *American journal of education, St. Louis, 7: 3–4, January 1874.*

    Reprinted in same journal, v. 9, p. 4, September 1876.

116. The national commissioner of education. *American journal of education, St. Louis, 7: 3, April 1874.*
117. The study of evolution in education. *American journal of education, St. Louis, 7: 3–4, July 1874.*
118. Thoughts on Shakespeare's historical plays. *Western, St. Louis* [4] *283–300, June 1874.*

    Reprinted in A library of American literature . . . Compiled and ed. by Edmund C. Stedman and Ellen M. Hutchinson. New York, C. L. Webster & co., 1888. v. 9, p. 334-336.

1875.

119. Bird's eye view of the St. Louis public-school system. *In* St. Louis. Board of education. 21st annual report for the year ending August 1, 1875, p. 178–184.
120. Course of reading. *Western, St. Louis, n. s., 1: 578–586, September 1875.*
121. History of the St. Louis public schools. *In* St. Louis. Board of education. 21st annual report for the year ending August 1, 1875, p. 161–184.
122. Ideal education in America. *Western, St. Louis, n. s., 2: 193–212, April 1876.*

    A paper read before the American social science association at Detroit, May 13, 1875. Reprinted in Pennsylvania school journal, 25: 183–188, November 1876.

123. Moral education. *American journal of education, St. Louis, 8: 4, 4–5, October and November 1875; 9: 4, January 1876.*
124. Necessity of free public high schools. *American journal of education, St. Louis, 8: 4, July 1875.*
125. On Beethoven's sixth symphony. *Western, St. Louis, n. s., 1: 381–389, June 1875.*
126. On the relation of the will to the intellect, or the regulative principle in human life. *Western, St. Louis, n. s., 1: 102–109, February 1875.*

127. Oriental philosophy and the Bhagavad Gita. *Western, St. Louis, n. s., 1: 635–654, October 1875.*
128. Thoughts on pessimism and educational reform. *Western, St. Louis, n. s., 1: 304–312, May 1875.*
129. Thoughts on the music of Beethoven. (As illustrated in the F major sonata for violin and piano.) *Western, St. Louis, n. s., 1: 218–223, April 1875.*
130. Trendelenburg and Hegel. *Journal of speculative philosophy, 9: 70–80, January 1875.*

1876.

131. A course of study from primary school to university. *Western, n. s., 2: 521–538, September 1876.*

    Read at the general session of the National educational association, Baltimore, July 12, 1876, by William T. Harris, chairman of a committee appointed at a meeting in Detroit to consider and report a course of study.

132. Culture and discipline *versus* information and dexterity. *Western, St. Louis, n. s., 2: 25–31, January 1876.*
133. School hygiene. *In* St. Louis. Board of education. 22d annual report for the year ending August 1, 1876, p. 64–71.
134. The division of school funds for religious purposes. *Atlantic monthly, 38: 171–184, August 1876.*
135. The history of philosophy. [In outline] *Journal of speculative philosophy, 10: 225–270, July 1876.*
136. The kindergarten—its philosophy. *In* St. Louis. Board of education. 22d annual report for the year ending August 1, 1876, p. 79–119.
137. The library—language culture. *In* St. Louis. Board of education. 22d annual report for the year ending August 1, 1876, p. 137–143.
138. The relation of religion to art. *Journal of speculative philosophy, 10: 204–215, April 1876.*

1877.

139. Education in the state of Missouri. *In* The Commonwealth of Missouri. A centennial record. St. Louis, 1877. p. 620–631.
140. Half-time schools for economy. *In* St. Louis. Board of education. 23d annual report for the year ending August 1, 1877, p. 196–207.
141. Kindergarten Americanized. *Journal of education, New England and national, Boston, 5: 18–19, January 11, 1877.*
142. Kindergarten—educational results. *In* St. Louis. Board of education. 23d annual report for the year ending August 1, 1877, p. 212–223.
143. Kindergarten. Froebel's gifts and occupations. *Journal of education, New England and national, Boston, 6: 7, June 28, 1877.*
144. Leigh's phonetics. *In* St. Louis. Board of education. 23d annual report for the year ending August 1, 1877, p. 225–228.
145. Methods of discipline and instruction. *American journal of education, St. Louis, 10: 6, March, 1877.*
146. Moral education in the public schools. New York, E. Steiger, 1877. 20 p. 12° [Papers on education. First series, 7]
147. On the nature of play. *Journal of education, New England and national, 5: 295, June 21, 1877.*
148. Organization and supervision of schools. *American journal of education, St. Louis, 10: 6, May 1877.*
149. Pedagogics as a province of education. *American journal of education, St. Louis, 10: 8–9, June 1877.*

150. Reasons for the retention of German-English instruction in the St. Louis public schools. [St. Louis, 1877] 15 p. 8°.

Reprinted from St. Louis. Board of Education. 23d annual report for the year ending August 1, 1877, p. 164–177.

151. The basis of education as a science. *Western, St. Louis, n. s., 3: 272–280, May 1877.*

152. "The fates," by Michael Angelo. *Journal of speculative philosophy, 11: 265–277, July, 1877.*

An essay read June 8, 1877, before the St. Louis Society of useful knowledge.

153. The idea of the state and its necessity. *Western, St. Louis, n. s., 3: 206–215, April 1877.*

154. The kindergarten. *American journal of education, St. Louis, 10: 8–9, 8, July and August 1877.*

155. The pilgrimage of the rose. *Western, St. Louis, n. s., 3: 424–429, July 1877.*

156. The sphinx riddles of education. *Western, St. Louis, n. s., 3: 639–660, November 1877.*

From an address delivered at the Massachusetts state normal school at Worcester July 10, 1877.

157. The third reader. [By W. T. Harris, A. J. Rickoff, and Mark Bailey] New York, Cincinnati, [etc.] American book co. [c1877]. 214 p. front., illus. 12° (Appleton's school readers)

158. The value of new kindergarten experiments. *Journal of education, New England and national, Boston, 5: 91, February 22, 1877.*

159. Thoughts on the history of education. *Western, St. Louis, n. s., 3: 332–344, June 1877.*

160. What the schools teach to fit pupils for their future vocations. *In* St. Louis. Board of education. 23d annual report for the year ending August 1, 1877, p. 189–195.

161. Words *vs.* things. The importance of the study of language. *Western, St. Louis, n. s., 3: 127–134, March 1877.*

1878.

162. Mendelssohn's "Song of praise." *Western, St. Louis, n. s., 4: 62–68, January 1878.*

163. Teaching of history of United States. *In* St. Louis. Board of education. 24th annual report for the year ending August 1, 1878, p. 161–164.

164. The first reader. [By W. T. Harris, A. J. Rickoff, and Mark Bailey] New York, Cincinnati, [etc.] American book co. [c1878]. 90 p. front., illus. 16° (Appleton's school readers)

165. The fourth reader. [By W. T. Harris, A. J. Rickoff, and Mark Bailey] New York, Cincinnati, [etc.] American book co. [c1878]. 248 p. front., illus. 12°. (Appleton's school readers)

166. The second reader. [By W. T. Harris, A. J. Rickoff, and Mark Bailey] New York, Cincinnati, [etc.] American book co. [c1878]. 142 p. front., illus. 12° (Appleton's school readers)

167. Theory of education. *In* Paris universal exposition, 1878. The Catalogue of the United States collective exhibition of education. . . . London, 1878. p. 12–30.

1879.

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170. Kindergarten in St. Louis—the history and philosophy of its methods. *In* St. Louis. Board of education. 25th annual report for the year ending August 1, 1879, p. 127–137, 190, 224.

Reprinted in United States. Bureau of education. Report of the Commissioner for the year 1896–7, v. 1, p. 899–922.

171. Method of study in social science. St. Louis, G. I. Jones and co., 1879. 23 p. 8°.

Lecture delivered before the St. Louis social science association, March 4, 1879. Also in American social science journal, 10: 28–34, December, 1879. Western, 5: 244–264, May, June, 1879.

172. Oral course of study in history (syllabus). *In* St. Louis. Board of education. 25th annual report for the year ending August 1, 1879, p. 225–230.

173. Place of the study of Latin and Greek in modern education. *In* American institute of instruction. Lectures, 1879, p. 91–119.

174. Supervision. *American journal of education, St. Louis, 12: 4, March 1879.*

175. The age of withdrawal from school. *In* St. Louis. Board of education. 25th annual report for the year ending August 1, 1879, p. 37–39, 46.

Reprinted in United States. Bureau of education. Report of the Commissioner for the year 1891–2, v. 1, p. 595–596, 599.

176. The fifth reader. [By W. T. Harris, A. J. Rickoff, and Mark Bailey] New York, Cincinnati, [etc.] American book co. [c1879]. xvii, 471 p. front., illus. 12° (Appleton's school readers)

177. The public school library: reading fiction as an educator. *In* St. Louis. Board of education. 25th annual report for the year ending August 1, 1879, p. 148–155.

178. The relations of the kindergarten to the school. *In* National educational association. Addresses and Journal of proceedings, 1879, p. 142–158.

179. The science of education. *Journal of speculative philosophy, 13: 205–214, April 1879.*

An analysis of the first part of Rosenkranz's "Pedagogics as a system," with a commentary on certain paragraphs. To accompany the paraphrase published in the Journal of speculative philosophy, January and July 1878.

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180. Course of study in history. [St. Louis, G. I. Jones and co., 1880. 15 p. 8°] Cover title: "Syllabus of topics for oral lessons in history, to which is added a syllabus of topics for oral lessons in good behavior and etiquette. For the St. Louis public schools."

181. Educational psychology. (Outlines of a system) *Journal of speculative philosophy, 14: 225–239, April 1880.*

182. Elective studies in schools and colleges. *American journal of education, St. Louis, 13: 9–10, September, 1880.*

183. Equivalents in a liberal course of study. Formal and substantial studies. *In* National educational association. Addresses and journal of proceedings, 1880, p. 167–175.

184. Formal and substantial studies. *American journal of education, St. Louis, 13: 8–9, August 1880.*

185. Report from a department sub-committee on kindergartens. [William T. Harris, Henry Barnard, and Emily Talbot] *Journal of social science, no. 12, part 1, p. 8–12, December 1880.*

A paper read at the Saratoga meeting of 1880 of the American social science association.

186. The tenth census from an educational point of view. *In* National education association. Department of superintendence. Proceedings, Washington, February 18–20, 1880. Washington, Government printing office, 1880. (United States. Bureau of education. Circular of information no. 2, 1880. p. 61–67)

187. Text-books and their uses. *In* National education association. Addresses and Journal of proceedings, 1880, p. 102–108.

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188. Analysis and commentary [of Karl Rosenkranz's Pädagogik als System]. *Journal of speculative philosophy, 15: 52–62, January 1881.*

189. Christianity in art. *Chautauquan, 2: 12–14, 135–137, 230–232, 264–266, 328–330, 395–397, 461–463, 527–529, 568–570, October 1881–July 1882.*

A discussion of "the nature of art and its five special forms—architecture, sculpture, painting, music, and poetry—devoting most consideration, however, to the department of painting as the chosen field of romantic art. Romantic art . . . is the Christian form of art."

190. Faith and knowledge: Kant's refutation of the ontological proof of the being of God. *Journal of speculative philosophy, 15: 404–428, October 1881.*

191. Hegel's doctrine of reflection, being a paraphrase and a commentary interpolated into the text of the second volume of Hegel's larger logic, treating of "essence." New York, D. Appleton and co., 1881. 214 p. 8°.

192. Kant and Hegel in the history of philosophy. *Journal of speculative philosophy, 15: 241–252, July 1881.*

193. Kant and his English critics. *Education, 2: 93–96, September 1881.*

A review of a book by John Watson, "Kant and his English Critics," New York, 1881.

194. Professor Seeley on the British race. *Journal of education, New England and national, Boston, 14: 5–6, June 30, 1881.*

195. The Belgian international congress of educators, 1880. *Education, 1: 623–632, July 1881.*

196. The church, the state, and the school. *North American review, 133: 215–227, September 1881.*

197. The philosophy of religion. *Journal of speculative philosophy, 15: 207–215, April 1881.*

198. The printing press as an instrument of education. *Education, 1: 371–383, March 1881.*

199. Thoughts on the basis of agnosticism. *Journal of speculative philosophy, 15: 113–120, April 1881.*

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200. Chairs of pedagogics. Report of committee on chairs of pedagogics in colleges and universities. [William T. Harris, chairman] *Education, 3: 153–157, November 1882.*

201. Do the public schools educate children beyond the position which they must occupy in life? [New Haven, 1882] p. 33–50. 8° Caption title.

An address delivered at the State teachers' association, New Haven, Conn., October 26–28, 1882. Reprinted from Connecticut. Board of education. Report 1882, p. 33–50. Also in United States. Bureau of education. Art and industry. Part 2. Washington, Government printing office, 1892. p. 589–596. 8°.

202. Hegel's four paradoxes. *Journal of speculative philosophy, 16: 113–122, April 1882.*

203. How to improve the qualifications of teachers. *In* National education association. Department of superintendence. Proceedings, Washington, March 21–23, 1882. Washington, Government printing office, 1882. p. 98–105. (United States. Bureau of education. Circular of information, no. 2, 1882)

Reprinted in Education, 2: 606–616, July 1882.

204. New England lectures on pedagogy. The history and philosophy of education. *Journal of education, New England and national, Boston, 16: 249, 265, 313, 345, 361, 377, 409, October 19, 26, November 16, 30, December 7, 14, 28, 1882; 17: 25, January 11, 1883.*

205. On the crime of educating the people in free common schools. *Journal of education, New England and national, Boston, 16: 227–228, October 12, 1882.*

206. Other institutions besides the school as instrumentalities of culture. *In* American social science association. Department of education. Address of the chairman. Journal of social science, no. 17, part 2, p. 133–155, May 1883.

Address delivered at the Saratoga meeting of 1882 of the American social science association.

207. Ralph Waldo Emerson. *Atlantic monthly, 50: 238–252, August 1882.*

Letter to Mr. Garland, and read at the "Birthday anniversary of Concord's Wise One." Reprinted in Journal of education, Boston and Chicago, 42: 7, June 27, 1895.

208. The education of the family, and the education of the school. *Journal of social science, no. 15, p. 1–5, February 1882.*

209. The history and philosophy of education. *Chautauquan, 3: 28–30; 79–81; 194–196; 262–263; 336–338; 446–448; 567–569, October 1882–July 1883.*

In this outline of the history and philosophy of education, the author undertakes "to show the essential connection of education to government and religion."

210. The purpose of the recitation. *Wisconsin journal of education, n. s., 12: 522–526, December 1882.*

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211. Moral education in the common schools. *Journal of social science, no. 18, p. 122–134, May 1884.*

A paper read at the Saratoga meeting of 1883 of the American social science association.

212. On the relation of the college to the common school. *In* American institute of instruction. 54th annual meeting. Lectures, discussions, and proceedings, 1883, Boston, 1884. p. 139–171.

213. Philosophy in outline. Being a brief exposition of the method of philosophy, and its results in obtaining a view of nature, man, and God. New York, London, D. Appleton and co., Trübner and co. [c1883]. 42 p. 8°.

Reprinted from Journal of speculative philosophy, 17: 296–316, 337–356, July and October, 1883.

214. The educational lessons of the census. *In* National education association. Department of superintendence. Proceedings, Washington, February 20–22, 1883. Washington, Government printing office, 1883. p. 24–34. (United States. Bureau of education. Circular of information, no. 3, 1883.)

215. The tools of thought. *Indiana school journal, 28: 181–183, April 1883.*

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216. On the function of the study of Latin and Greek in education. [Boston, 1884] 13 p. 8° (Papers of the Education department: American social science association) Caption title.

An address by W. T. Harris, chairman of the Department of education, American social science association. Read Tuesday, September 4, 1884.

217. Pedagogics as a science. [Report to the committee on pedagogics] *In* National council of education. Proceedings of 4th annual meeting, Madison, Wisconsin, July 1884. Boston, 1885. p. 49–55.

218. Recess. *In* National education association. Department of superintendence. Proceedings, Washington, February 12–14, 1884. United States. Bureau of education. Circular of information no. 4, 1884, p. 59–66.

—— [St. Louis, 1884] 8 p. 8° (Popular education document, no. 20) Caption title.

219. Relation of the art to the science of education. *In* National education association. Journal of proceedings and addresses, 1884. Boston, 1885. p. 190–194.

220. Report on the exposition of education at Madison, Wisconsin. *In* National education association. Journal of proceedings and addresses, 1884. Boston, 1885. p. 82–85.

221. Roland G. Hazard's works. *Journal of speculative philosophy, 18: 71–83, January 1884.*

222. The dialectic unity in Emerson's prose. *Journal of speculative philosophy, 18: 195–202, April 1884.*

223. The modern growth of cities and the education demanded by it. *In* United States. Bureau of education. Special report. Educational exhibits and conventions at the World's industrial and cotton centennial exposition, New Orleans, 1884–85. Part 1. Catalogue of exhibits. Washington, Government printing office, 1886. p. 474–481.

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224. Compulsory education in relation to crime and social morals. [Washington, 1885, privately printed] 13 p. 8° Caption title.

Delivered before the Twelfth annual conference of Charities and correction, Washington, D. C., 1885. Reprinted in United States. Bureau of education. Report of the Commissioner for the year 1898–99, v. 2, p. 1311–1318.

225. Educational needs of urban civilization. *Education, 5: 443–453, May 1885.*

226. Emerson's Orientalism. *In* Sanborn, F. B., *ed.* The genius and character of Emerson. Lectures at the Concord school of philosophy. Boston, James R. Osgood and co., 1885. p. 372–385.

227. Emerson's philosophy of nature. *In* Sanborn, F. B., *ed.* The genius and character of Emerson. Lectures at the Concord school of philosophy. Boston, James R. Osgood and co., 1885. p. 339–363.

228. Emerson's relation to Goethe and Carlyle. *In* Sanborn, F. B., *ed.* The genius and character of Emerson. Lectures at the Concord school of philosophy. Boston, James R. Osgood and co., 1885. p. 386–419.

229. Immortality of the individual. Being a brief survey of the grounds upon which philosophy bases its doctrines of human immortality. New York, London, D. Appleton and co., Trübner and co. [c1885]. 32 p. 8°.

Reprinted from Journal of speculative philosophy, 19: 189–219, April, 1885.

Discusses so-called spiritual manifestations; the Greek thought of the soul as a self-active entity; Herbert Spencer's pantheistic theory; and the general proof of immortality resting on the idea that every independent being is and must be self-determined. No ethics and no theism without individual immortality. It presupposes the logos doctrine.

230. Is pantheism the legitimate outcome of modern science? *Journal of speculative philosophy, 19: 407–428, October 1885.*

Read at the Concord school of philosophy, July 30, 1885.

231. Method of pedagogical inquiry. [A special report, made to Dr. E. E. White, president of the National council of education] *In* National education association. Journal of proceedings and addresses, 1885. New York, 1886. p. 492–503.

232. Psychological inquiry. *In* National education association. Journal of proceedings and addresses, 1885. New York, 1886. p. 91–101.

Reprinted in Education, 6: 156–168, November, 1885.

233. Select spelling and pronouncing lessons. New York, etc., American book co. [c1885]. 25 p. 12°.

From Appleton's school-readers.

234. Social science and social conditions. *Journal of social science, no. 21, p. 21–22, September 1886.*

Abstract of remarks at the Saratoga meeting of 1885 of the American social science association.

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235. English and German. A study in the philosophy of history. *Andover review, 6: 590–607, December 1886.*

236. Goethe's Faust. *In* Sanborn, F. B., *ed.* The life and genius of Goethe. Lectures at the Concord school of philosophy. Boston, Ticknor and co., 1886. p. 368–445.

"It is, if I am not mistaken, the most interesting event in literary history, that Goethe should conduct his hero from pantheistic agnosticism to Christian theism."

237. How I was educated. *Forum, 1: 552–561, August 1886.*

Reprinted in The "How I was educated" papers. New York, D. Appleton and co., 1888. p. 50–59.

238. Industrial education in the common schools. *Education, 6: 607–611, June 1886.*

239. Philosophy made simple. *Chautauquan, 6: 323–325, 374–377, 437–440, March–May 1886.*

240. Religion in art. *Chautauquan, 6: 190–193, 255–258, 314–316, January–March 1886.*

241. The international education series. Edited by William T. Harris. New York, D. Appleton and co., 1886–1904. 57 v.

Dr. Harris has contributed to each volume an introduction, analysis, and commentary.

242. The right of property and the ownership of land. Read before the National social science association, at Saratoga, September 10, 1886. Rev. with additions. [Boston, Cupples, Hurd and co., ©1887] 40 p. 8° Cover title: "The right of property and the ownership of land."

Reprinted from Journal of social science, no. 22.

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243. A theory of insanity. *Journal of speculative philosophy, 21: 222–224, October 1887.*

244. Books that have helped me. *Forum, 3: 142–151, April 1887.*

Reprinted in "Books that have helped me." New York, D. Appleton and co., 1889. p. 15–34.

245. [Discussion of "The psychological and pedagogical value of the modern methods of elementary culture," by Prof. J. W. Stearns *and others*] *In* National education association. Journal of proceedings and addresses, 1887. Salem, Mass., 1888. p. 87–91.

246. Goethe's Wilhelm Meister. *In* Dudley, Marion V., *ed.* Poetry and philosophy of Goethe. Comprising the lectures and temporary discussions before the Milwaukee literary school in August, 1886. Chicago, S. C. Griggs and co., 1887. p. 12–37.

247. Henry George's mistake about land. *Forum, 3: 433–442, July 1887.*

248. How to teach natural science in public schools. Syracuse, N. Y., C. W. Bardeen, 1887. 40 p. 12° ([School bulletin publications] School-room classics. xi)

—— 2d ed., from new plates. Syracuse, N. Y., C. W. Bardeen, 1895. viii, [9]–46 p 12°.

249. Plato's dialectic and doctrine of ideas. *Journal of the American akadêmê, 3: 175–199, May 1887.*

Reprinted in Journal of speculative philosophy, 22: 94–118, January, April 1888.

250. The definition of social science and the classification of the topics belonging to its several provinces. *Journal of social science, no. 22, p. 1–7, June 1887.*

251. The function of the library and the school in education. *In* National education association. Journal of proceedings and addresses, 1887. Salem, Mass., 1888. p. 267–269.

252. The spiritual sense of Dante's "Divina Commedia." *Journal of speculative philosophy,* 21: 349–451, October 1887.

—— New York, D. Appleton and co., 1889. 212 p. 16° square.

252. The spiritual sense of Dante's "Divina Commedia." new ed. Boston, New York, Houghton, Mifflin and co., 1896. xxi, 193 p. 12°.

To this edition is added "Dante's doctrine of sin," which was published in the Year-book of the American Dante society. 1890–91. [New York, 1891] p. 69–81.

—— London, K. Paul, Trench, Trübner and co., ltd., 1901. xxi, 193 p. 12°.

The London edition is a reprint of the Houghton, Mifflin and co. edition.

. . . "Of all the great world-poems, unquestionably Dante's Divina Commedia may be justly claimed to have a spiritual sense, for it possesses a philosophic system and admits of allegorical interpretation. It is *par excellence* the religious poem of the world."

A discussion by Dr. Harris of the Divine Comedy and Faust is contained in Poetry and philosophy of Goethe, *ed.* by Marion V. Dudley, Chicago, 1887. p. 126–137.

253. What is most valuable to us in German philosophy and literature. *In* Dudley, Marion V., *ed.* Poetry and philosophy of Goethe . . . Chicago, S. C. Griggs and co., 1887. p. 219–251.

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254. American education. *American journal of education, St. Louis, 21: 8–9, August 9, September 9, October 9, November 9, 1888.*

255. [Discussion of paper by Lucy M. Washburne, on "The subject-matter that properly belongs to the normal-school curriculum"] *In* National education association. Journal of proceedings and addresses, 1888, p. 494–496.

256. Excessive helps in education. *Education, 9: 215–220, December 1888.*

257. On the duty of the high school to support the college. *Pennsylvania school journal, 37: 44–53, August 1888.*

Read at the Pennsylvania teachers' association, at Scranton, Penn., July 4, 1888.

258. On the necessity of colleges to supplement the high schools. *In* Ohio teachers' association. Proceedings, 1888, p. 435–452.

259. Ought young girls to read the daily newspapers? *In* National education association. Journal of proceedings and addresses, 1888, p. 86–89.

260. Our public school system. *Chautauquan, 8: 278–280, February 1888.*

261. Philosophy in colleges and universities. *In* National education association. Journal of proceedings and addresses, 1888, p. 439–444.

Reprinted in Education, 9: 96–102, October 1888.

262. The church and the state. *True educator, Mass., 4: 122–123, April 1888.*

Extract from an address before the Boston congregational club.

263. The pendulum of school reform. *Education, 8: 347–350, February 1888.*

264. The present need of moral training in the public schools. *Journal of education, New England and national, Boston, 27: 131, March 1, 1888.*

265. Report of the committee on higher education. The elective system in colleges. Communication from Wm. T. Harris. *In* National education association. Journal of proceedings and addresses, 1888, p. 276–277.

266. United States. Bureau of education. Report of the Commissioner of education [with accompanying papers]. Washington, Government printing office. 1888–89–1904. 17 v.

Dr. Harris served as Commissioner of education from September 12, 1889, to June 30, 1906. The introductions to the reports were written by him.

267. What shall the public schools teach? *Forum, 4: 573–581, February 1888.*

1889.

268. Art education the true industrial education—a cultivation of aesthetic taste of universal utility. [Topeka, Kans] 1889. 9 p. 8° Caption title.

A paper read before the Department of art education, National education association, Nashville, Tenn., July 1889. Reprinted from National education association. Journal of proceedings and addresses, 1889, p. 647–655. Also in United States. Bureau of education. Report of the Commissioner for the year 1904, v. 1, p. 1133–9.

269. City school systems. [Discussion of the report made in 1888] *In* National education association. Journal of proceedings and addresses, 1889, p. 437–438.
270. Edward Bellamy's vision. *Forum, 8: 199–208, October 1889.*
271. Emerson's "Brahma, and the Bhagavad Gita." *Poet-lore, 1: 253–259, June 1889.*
272. Goethe's "World spirit," and the Vishnu of the "Bhagavad Gita." *Poet-lore, 1: 401–406, September 1889.*
273. Historic ornament—why drawing teachers should teach historic ornament. *Journal of education, Boston and Chicago, 30: 7–8, June 27, 1889.*

    Reprinted in United States. Bureau of education. Art and industry. Part 2. Washington, Government printing office, 1892. p. 1314–16.

274. Morality in the schools. (Register tract series, no. 12) 14 p. 24°.

    Written as a review of discussion in the Christian register, Boston, Jan. 31, 1889, on the question: "Can morality be taught in the public schools without sectarianism?"

275. On the normal school course of study. (Oration) State normal school, Framingham, Mass. Semicentennial celebration, July 2, 1889. *In* Report of alumnæ association of the first state normal school in the [new] world. Boston, 1889. p. 10–33.
276. Our public schools: Can morality be taught without sectarianism? [Symposium] *Journal of education, New England and national, 29: 99, February 14, 1889.*
277. Report of committee on normal education. Professional and academic studies in normal schools. Communication from W. T. Harris. *In* National education association. Journal of proceedings and addresses, 1889, p. 397–399.
278. The educational value of manual training. Report of the committee on pedagogics. (Presented by W. T. Harris) [Topeka, Kans., 1889] 14 p. 8°. Caption title.

    A paper read before the National council of education at Nashville, Tenn., July 1889. Reprinted from the National education association. Journal of proceedings and addresses, 1889, p. 417–423. Also in Two papers on manual training . . . Washington, Government printing office, 1890. p. 9–14. 8°.

279. The intellectual value of tool-work. *In* National education association. Journal of proceedings and addresses, 1889, p. 92–98.

    Reprinted in two papers on manual training . . . Washington, Government printing office, 1890. p. 3–8. 8°. Also in United States. Bureau of education. Report of the Commissioner for the year 1904, v. 1, p. 1139–1144.

280. The kindergarten methods contrasted with the methods of the American primary school. [Topeka, Kans., 1889] 12 p. 12°.

    A paper read before the kindergarten department of the National education association, Nashville, Tenn., July 17, 1889. Reprinted from the National education association. Journal of proceedings and addresses, 1889, p. 448–453.

281. The psychology of manual training. [Boston, 1889] 22 p. 8°. Caption title.

    Reprinted from Education, 9: 571–582, May 1889. Also in National education association. Department of superintendence. Proceedings, Washington, March 6–8, 1889. United States. Bureau of education. Circular of information no. 2, 1889. p. 117–132. And in United States. Bureau of education. Art and industry. Part 2. p. 905–916.

282. The study of natural science,—its uses and dangers. *In* American institute of instruction. Lectures, 1889. p. 15–30.

——— [1889] 11 p. 8°. Caption title.

    Paper read at the American institute of instruction, Bethlehem, N. H., July 1889.

283. Thoughts on educational psychology. Being a reprint of a series of papers originally published in the Illinois school journal . . . [Bloomington, Ill.] [° 1889] 73 p. Portrait. 8°. On cover: copyright, 1890.
284. Windows of the soul. *Indiana school journal, 34: 85–86, February 1889.*

1890.

285. Dante's doctrine of sin. *In* Year-book of the American Dante society. 1890–91. [New York, 1891] p. 69–81.

Reprinted in The spiritual sense of Dante's Divina Commedia. new ed. Boston, New York, Houghton, Mifflin and co., 1896. xxi, 193 p. 12°. Also in the London edition of same work, published by K. Paul, Trench, Trübner and co., ltd., 1901.

"In the eighteenth Canto of his *Purgatorio* Dante lays down the doctrine of freedom, which is the basis of responsibility, and hence of that which makes sin and punishment possible."

286. German instruction in American schools and the national idiosyncrasies of the Anglo-Saxons and the Germans. [Chicago, 1890] 16 p. 8°.

Delivered before the National German-American teachers' association, Cleveland, Ohio, July 16, 1890.

This monograph contains also a paper by John B. Peaslee on "Instruction in German and its helpful influence on common school education, as experienced in the public schools of Cincinnati." p. 8–16.

287. Introduction to the study of philosophy. Comprising passages from his [Dr. Harris'] writings, selected and arranged with commentary and illustration by Marietta Kies. New York, D. Appleton and co., 1890. xii, 287 p. 12°.

288. Pedagogical and psychological observation. Report of special committee. [George P. Brown and Wm. T. Harris] Supplemental report, signed by Dr. Harris. *In* National education association. Journal of proceedings and addresses, 1890, p. 108–113. p. 113–118.

289. Philosophic aspects of history. [1890] 8 p. 8°.

Reprinted from Proceedings of the American historical association, 1890, p. 248–254.

290. Report on the Henry Barnard fund. *In* National education association. Journal of proceedings and addresses, 1890, p. 51.

291. Response to addresses of welcome. *In* National education association. Journal of proceedings and addresses, 1890, p. 87–88.

292. Supplemental report to the report of the special committee on pedagogical and psychological observation. [Topeka, Kans., 1890] 6 p. 8°. Caption title.

—— Syracuse, N. Y., C. W. Bardeen, 1890. 6 p. 8°. [Papers on school issues of the day, xv]

293. The general government and public education throughout the country. [Topeka, Kans., 1890] 8 p. 8°. Caption title.

A paper read before the Department of superintendence, February 1890. Reprinted from National education association. Journal of proceedings and addresses, 1890, p. 481–489.

294. The philosophic aspects of history. [New York] 1890. 8 p. 8°. Caption title.

Reprinted from the American historical association. Proceedings, 1890, p. 247–254.

295. The philosophy of crime and punishment. [Cincinnati, 1890] 19 p. 8°.

Read before the National prison association of the United States, at Cincinnati, Ohio, September 1890.

296. The proper place of the Y. M. C. A. in the educational field. *Education, 11: 265–272, 345–352, January and February 1891.*

Address before the business school of the Young Men's Christian Association, Washington, D. C., April 11, 1890; stenographically reported by J. R. Slater.

297. The single tax. *Journal of social science, no. 27, p. 113–121, October 1890.*

298. University and school extension. [Topeka, Kans.] 1890. 12 p. 8°. Caption title.

An address delivered before the National education association, at St. Paul, Minn., July 1890. Reprinted from the National education association. Journal of proceedings and addresses, 1890, p. 242–253.

299. Value of school discipline. *Pennsylvania school journal, 39: 27–28, July 1890.*

1891.

300. Education as exhibited at World's Fairs. *In* United States. Bureau of education. World's Columbian exposition educational exhibit. Bulletin no. 2, 2d. ed., Sept. 10, 1891.

301. Fruitful lines of investigation in psychology. *Educational review, 1: 8–14, January 1891.*

302. Report of the committee on educational statistics. School statistics. [W. T. Harris, chairman] *In* National education association. Journal of proceedings and addresses, 1891, p. 361–369.

Reprinted in United States. Bureau of education. Report of the Commissioner for the year 1890–91, v. 2, p. 1011–1013.

This report "discusses some of the preliminary questions relative to the character of the statistics which it is considered desirable to obtain." It was made to the National council of education, at Toronto, Ontario, July 1891. Offers a theory of school statistics and indicating the data which throw light upon the efficiency of schools.

303. Response to addresses of welcome. *In* National education association. Journal of proceedings and addresses, 1891, p. 72–73.

304. Suggestions [regarding educational exhibits at World's Fair]. *In* United States. Bureau of education. World's Columbian exposition educational exhibit. Bulletin no. 3, July 15, 1891.

305. The best works on pedagogy for young teachers. *New England journal of education, 33: 131, February 26, 1891.*

306. The National educational association: its organization and functions. [1891] 15 p. 12°.

A paper read before the Department of superintendence of the National education association, Philadelphia, Feb. 24, 1891. National education association. Journal of proceedings and addresses, 1891, p. 443–451. United States. Bureau of education. Report of the Commissioner for the year 1892–93, v. 2, p. 1502–1512.

307. The place of university extension in American education. [Philadelphia, J. B. Lippincott co., 1892] 14 p. 8°. Cover title: "The place of university extension in American education. Reprinted from the Proceedings of the first annual meeting of the National conference on University extension." [Philadelphia, December 1891]

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376. The æsthetic element in education. [1897] 16 p. 16°.

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"It is the practical part of this discussion to show that architecture, sculpture, and painting should add their healthful lesson to the curriculum of the school."

377. The lesson of Goethe's Faust. [Cincinnati, —] 18 p. 16°.

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379. Why art and literature ought to be studied in elementary schools. New York, 1897. p. 324–333. 8°. Caption title.

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380. Addresses of welcome. *In* National education association. Journal of proceedings and addresses, 1898, p. 49–51.

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383. Facts relating to education. United States. Bureau of education. Washington, June, 1898. 10 p. 8°. (Folding sheet) Caption title.

384. Is there work enough for all? *Forum, 25 : 224–236, April 1898.*

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"It is an attempt to show the psychological foundations of the more important educational factors in civilization and its schools. Special stress is laid on the evolution of the higher activities or faculties, and on the method of it."—W. T. Harris: preface, p. x.

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An address before the graduates at the commencement exercises of the Indian industrial school, Carlisle, Penn., March 2, 1899.

394. An educational policy for our new possessions. New York, 1899. p. 105–118. 8°. Caption title.

An address before the National education association, Los Angeles, California, July 11, 1899. Reprinted from Educational review, 18: 105–118, September 1899. Also in National education association. Journal of proceedings and addresses, 1899, p. 69–79.

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396. Erroneous interpretation of prison statistics. *In* United States. Bureau of education. Report of the Commissioner for the year 1898–99, v. 2, p. 1335–1338.

An interview with Dr. Harris, reprinted from "Brooklyn (N. Y.) Eagle," October 8, 1899.

397. History of the public schools of St. Louis. *In* Encyclopedia of the history of St. Louis. New York, Louisville, and St. Louis, 1899. v. 4, p. 2013–2019.

398. How to make good teachers out of poor ones. *In* National education association. Journal of proceedings and addresses, 1899, p. 310–314.

399. Influence of the schools in France. *In* United States. Bureau of education. Report of the Commissioner for the year 1898–99, v. 2, p. 1338–9.

Letter of the U. S. Commissioner of Education, October 14, 1899, to Prof. E. C. Branson, State normal school, Athens, Ga.

400. Kindergarten psychology. Four abstracts of lectures delivered at the Kindergarten college, Chicago, Illinois, April 1899.

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401. Preliminary report on school hygiene. [Wm. T. Harris, chairman] *In* National education association. Journal of proceedings and addresses, 1899, p. 406–411.

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A paper read at the Washington meeting of 1900 of the American social science association.

404. Civilizing the natives of Alaska. *Ainslee's magazine, 6: 172–180, September 1900.*

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406. Colonel Parker and the Quincy school. *In* United States. Bureau of education. Report of the Commissioner for the year 1901–2, p. 245–248.

Address delivered at the celebration of the 25th anniversary of the inauguration of the Quincy movement, April 20, 1900.

407. [Discussion of paper by Nicholas Murray Butler, on "Status of education at the close of the century"] *In* National education association. Journal of proceedings and addresses, 1900, p. 199–203.

408. Elementary education. [Albany, N. Y., J. B. Lyon co., 1900] 63 p. 8°. (Monographs on education in the United States, ed. by N. M. Butler, 3)

At head of title: Department of education for the United States commission to the Paris exposition of 1900.

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409. The charge against the schools of Washington city. *Intelligence, 20: 655–7, November 1, 1900.*

410. The educative work at missions. [New York, 1900] 10 p. 16°. obl. Caption title.

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Reprinted from Educational review, 20: 217–229, October 1900.

414. The study of arrested development in children as produced by injudicious school methods. [Boston, 1900] 14 p. 8°. Caption title.

Reprinted from Education, 20: 453–466, April 1900.

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418. Educative work at missions. *School and home education, 20: 427–30, May 1901.*

419. Establishment of the office of the commissioner of education of the United States, and Henry Barnard's relation to it. [Chicago] 1901. p. 407–437. 8°. Caption title.

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425. Spelling reform. A discussion by E. O. Vaile, Slosson Thompson, Emerson E. White, William T. Harris, *et al.* Formal discipline. A discussion of an address by Professor L. B. R. Briggs on "Some aspects of grammar-school training," by Dr. William T. Harris. Chicago, the University of Chicago press, 1901. p. 25–147. 8°.

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428. Women in the legal profession. [Washington, 1901] 7p. 12°.

An address delivered at the third annual commencement of the Washington college of law, May 22, 1901.

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431. How the school strengthens the individuality of the pupil. New York, 1902. p. 228–237. 8°. Caption title.

An address delivered before the National education association, at Minneapolis, Minn., July 11, 1902.

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433. Newspapers in Indian schools. *In* National education association. Journal of proceedings and addresses, 1902, p. 875–877.

434. Observations on physical training in and out of school. *Journal of education, New England and national, Boston, 56: 411–412, December 25, 1902; 57: 4–5, 9, January 1, 1903.*

435. Response to address of welcome. *In* National education association. Journal of proceedings and addresses, 1902, p. 830.

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438. The place of geography in the elementary schools. [New York, 1902] p. 539–550. 8°. Caption title.

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440. Address at the dedication of the McKinley manual training school, Washington, Jan. 29, 1903. *In* United States. Bureau of education. Report of the Commissioner for the year 1903, v. 2, p. 1366–1367.

441. How the normal school fits for the work of teaching. *In* Chicago. Board of education. Bulletin, series 1, no. 10, December 28, 1903. p. 85–88.

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443. Religious instruction in public schools. *Independent, 55: 1841–43, August 1903.*

See commentary in Literary Digest (by editor), 27: 261.

444. Response to address of welcome. *In* National education association. Journal of proceedings and addresses, 1903, p. 44–45.

445. The kindergarten as a preparation for the highest civilization. *Atlantic educational journal, 6: 35–36, July–August 1903.*

Read at the meeting of the International kindergarten union, Pittsburgh, Penn., 1903.

446. The "Laboratory" for the study of abnormal classes, "begun in Bureau of education, at Washington," a myth. [Brooklyn, N. Y.] 1903. 11 p. 8° Caption title.

Reprinted from Sanitarian, Brooklyn, N. Y., August 1903.

A reply to an editorial in the Inter-state medical journal, St. Louis, Mo., entitled, "Laboratory for study of abnormal classes."

447. The separation of the church from the tax-supported school. New York, 1903. p. 222–235. 8° Caption title.

Read before the National council of education, at Boston, July 7, 1903. Reprinted from Educational review, 26: 222–235, October 1903. Also in National education association. Journal of proceedings and addresses, 1903, p. 351–60.

1904.

448. Exhibit of the United States bureau of education. [An abstract] *In* National education association. Journal of proceedings and addresses, 1904, p. 183.

449. Herbert Spencer and his influence on education. [Winona, Minn., 1904] p. 46–55. 8° Caption title.

Reprinted from the proceedings of the Department of superintendence of the National education association, 1904, p. 46–55. Also in Journal of proceedings and addresses, 1904, p. 214–223.

"The education that he proposes he tells us is for the purpose of complete living. Each child should be brought to school to learn the art of complete living. What is Spencer's definition of this art of complete living? With him education is something useful for showing how to take care of the body and how to perform the lower social functions—the preparation of food, clothing, and shelter. The first education, according to him, is not that which relates to man's spiritual life and to the preparation of man to understand the view of the world entertained by his civilization; that would be the religious ideal and the social ideal. 'The first knowledge which man should seek is the knowledge which goes to *direct self-preservation.*'"

450. On physical training in and out of school. *Southern school journal, 15: 3–7, September 1904.*

451. Primary and secondary phases of causality. National science founded on the latter and theology on the former. [Philadelphia, 1904] 8 p. 8° Caption title.

Read before the American philosophical association at Philadelphia, Pa., December 29, 1904.

"It is the insight into the transcendent first cause that provides through theism for an enlightened natural science."

452. Response to address of welcome. [Stenographic report] *In* National education association. Journal of proceedings and addresses, 1904, p. 55–59.

453. Social culture in the form of education and religion. New York, 1905. p. 18–37 8° Caption title.

Paper read before the International congress of arts and science, Division G—social culture, at the Louisiana purchase exposition, St. Louis, September 19–24, 1904. Reprinted from Educational review, January 1905, p. 18–37. Also in Congress of arts and science, Universal exposition, St. Louis, 1904. Edited by Howard J. Rogers. v. 8, education, religion. p. 1–16. Boston, New York, 1907. 8°.

. . . "Social culture in the form of the church and the school as independent institutions becomes possible only on the basis of the religious world-view of Christianity; and that the perennial continuance of the world-view of Christianity through the special form of social culture which belongs to the church is a necessary condition presupposed by the forms of social culture intrusted to the school."

454. The growth of the public high-school system in the Southern states and a study of its influence. New York, 1904. p. 259–269. 8° Caption title.

A paper read at the annual meeting of the Southern education association, Atlanta, Ga., January 1, 1904. Reprinted from Educational review, 27: 259–269, March 1904.

455. The practical lessons of history. [Washington, 1904. 15 p. 8°] Cover title: Columbian university, Washington, D. C. Department of arts and sciences. Syllabus of ten lectures on the philosophy of history, by Hon. Wm. T. Harris . . . Course in philosophy, 1904.

456. The reports of the Mosely educational commission. New York, 1904. p. 110–129. 8 Caption title.

Reprinted from Educational review, 28: 109–129, Sept. 1904. Also in United States. Bureau of education. Report of the Commissioner for the year 1905, v. 1, p. 1–10.

1905.

457. Address at celebration of centennial of New York public schools. *In* New York. Board of education. Minutes, April 1905. p. 625–7.

458. Clara Conway. (Memorial address.) *In* National education association. Journal of proceedings and addresses, 1905, p. 334–335.

459. Convocation address. *In* Lewis and Clark educational congress. Program, organization, and addresses. August 28 to September 2, 1905. Portland, Oregon [1905] p. 2–23

460. Some of the conditions which cause variation in the rate of school expenditures. Winona, Minn., 1905. p. 46–63. 8° Cover title: Conditions which cause variation in the rate of school expenditures. Printed at the University of Chicago press.

Reprinted from the National education association. Journal of proceedings and addresses, 1905, p. 195–213.

461. The future of teachers' salaries. [New York, ©1905] 16 p. 8°.

Reprinted from Educational foundations, 16: 8–21, September 1905. Also in National education association. Journal of proceedings and addresses, 1905, p. 67–78.

462. The political economy of school finances: some of the conditions which cause variation in the rate of school expenditures in different localities. New York, 1905. p. 486–509. 8° Caption title.

Read before the Department of superintendence of the National education association, Milwaukee, Wis., March 1, 1905. Reprinted from Educational review, 29: 486–509, May 1905. Also in National education association. Journal of proceedings and addresses, 1905, p. 195–213.

A presentation of economic conditions in the United States and illustrated by various tables of statistics.

1906.

463. [Discussion of report on geography] *In* Report on geography presented by New England association of school superintendents, Nov. 15, 1906, Everett, Mass. p. 87–102.

464. How the superintendent may correct defective classwork and make the work of the recitation teach the pupil how to prepare his lesson properly. *Journal of education, New England and national, 64: 159–62, August 16, 1906.*

Read before the American institute of instruction, July 12, 1906. Also in National education association, 50th anniversary volume, 1857–1906, p. 341–351.

465. Organization and functions of the national educational association. *In* National education association, fiftieth anniversary volume, 1857–1906, p. 529–533.

466. School city. Syracuse, N. Y., C. W. Bardeen [1906]. 19 p. 16°.

Reprinted from School bulletin, 32: 113–114, March 1906.

467. What kind of language study aids in the mastery of natural science? [Winona, Minn., 1907] 12 p. 16° Caption title.

Read before the Department of superintendence at Louisville, February 27, 1906. Reprinted from National education association, fiftieth anniversary volume, 1857–1906, p. 73–79. Also in School bulletin, 34: 65–67, December 1907.

1907.

468. Public school finances. What next? [Discussion, National council of education] *In* National education association. Journal of proceedings and addresses, 1907, p. 356–357.

469. Response to address of welcome. *In* National education association. Journal of proceedings and addresses, 1907, p. 56–58.

1908.

470. New currency plan. Evening Star, Washington, D. C., January 20, 1908.

"A system of convertible bonds issued by the government, paying a low rate of interest (1.82½ per cent—something less than 2 per cent), but purchasable in any amount for currency on any business day at the United States Treasury or any subtreasury, or in small amounts at money-order post-offices, and likewise convertible into currency for principal plus accrued interest on any day when presented for payment—such a system would furnish a perfectly elastic currency and would free the money from the danger of hoarding."

ADDENDA.

471. Eternity of Rome. *In* A library of American literature . . . Compiled and edited by Edmund Clarence Stedman and Ellen Mackay Hutchinson. New York, Charles L. Webster and co., 1888. v. 9. p. 336–337.

472. George William Frederick Hegel (1770–1831). *In* Library of world's best literature. Charles Dudley Warner, *ed.* New York, R. S. Peale and J. A. Hill [°1897]. v. 12. p. 7161–7173.

This article is followed by extracts from Hegel's Philosophy of history, with explanatory introductions by Dr. Harris, viz: Transition to the Greek world, p. 7174; the Problem, p. 7175; the Greek world, p. 7176; the Meaning of Christianity, p. 7177; the Doctrine of the Trinity, 7179; the Nature of evil, 7180; the Fall, 7182; the Atonement, 7183.

473. The personality of God. *In* A library of American literature . . . Compiled and edited by Edmund Clarence Stedman and Ellen Mackay Hutchinson. New York, Charles L. Webster and co., 1888. v. 9. p. 332–334.

Reprinted from North American review, 131: 241.

474. The isolation of the school: its educational function. [New York, 1901] 7 p. 8°.

Reprinted from Independent, August 1, 1901.

475. Theory of American education. [St. Louis, Western publishing and school furnishing co., 1870] 19 p. 8°. [Popular education document, no. 2]

476. Educational value of the tragic as compared with the comic in literature and art. [Boston?] 1898. 16 p. 12°.

477. German reform in American education. St. Louis, Hobart and co. [1872?] 12 p. 8°.

478. United States. Bureau of education. Circular of information, 1890, no. 2; 1891, nos. 2, 3, 5, 7–9; 1892, nos. 1, 2; 1893, nos. 1–6; 1894, nos. 1, 2; 1898, nos. 1–3; 1899, nos. 1–3; 1900, nos. 1–4; 1902, nos. 1–4; 1903, nos. 1–3. Washington, Government printing office, 1890, 1891–1894, 1898–1900, 1902–1903.

Letters of transmittal to the above circulars were written by Dr. Harris.

479. The intellectual value of tool work. Scientific American, supplement, 62: 25607–8, August 18, 1906.

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CHAPTER III.

EDUCATION IN GREAT BRITAIN AND IRELAND, 1906–1907.[a]

Great Britain and Ireland, Constitutional Monarchy: Area, England and Wales, 58,186 square miles; population, 34,547,016 in 1906. Scotland, 29,820 square miles; population (estimated, 1906), 4,726,070. Ireland, 32,583 square miles; population (estimated, 1906), 4,386,035.

TOPICAL OUTLINE.

1. EDUCATION IN ENGLAND AND WALES.

Introduction: Trend of recent events; authorities, central and local.—New legislation, 1907: Education (administrative provisions) act; special appropriation for new elementary schools; increased appropriations for secondary schools; the woman's qualification act.—Measures taken by the Board of Education for the accomplishment of its increased administrative duties: Reorganization of the consultative committee; establishment of a medical department; increased scale of grants for secondary schools.—Measures pertaining to the conduct of schools: New regulations for the teachers' training colleges and for secondary schools, their political bearings and educational purposes; the preparatory training of future teachers.—Report of the consultative committee on higher elementary schools: Opposition excited by contrast with Welsh policy.—Measures pertaining to the ordinary elementary schools: Improvement of rural schools; development of industrial arts; promotion of physical training; medical inspection of schools, and provision of meals.—The work of local authorities.—Forces shaping education in England.—The shifting current of thought: Recent addresses by Sir Philip Magnus and Dr. M. E. Sadler.

Statistical summary.—Elementary schools: Summary of enrollment, current expenditure, number and average salaries of teachers; detailed statistics (Tables 1–3); relative progress of public and voluntary schools; current expenditure (Tables 4–5).—Training colleges for teachers: Classification and statistics (Tables 6–8A); expenditure.—Summarized statistics of county boroughs having more than 300,000 inhabitants.

Higher education.—Application of the expression; relation to central and local authorities.—Schools recognized as secondary; control and current statistics.—Technical and art schools and classes.—Expenditure on account of education other than elementary.

2. PUBLIC EDUCATION IN SCOTLAND.

Brief conspectus of the system.—Schools organized by law of 1872; compulsory attendance; religious instruction; remission of fees; central authority; local authorities. Defects of the system.—Recent attempts at corrective legislation.

Progressive policy of the education department.—The merit certificate; the supplementary course; improvement in higher grade schools; new classification of schools; memoranda on the teaching of various branches.

Current operations of the elementary and higher grade schools.—Summary of enrollment, average attendance, and per capita expenditure; detailed statistics, current and comparative (Tables 11–14); course of study; savings banks and school libraries.—Teachers: Number; training; salaries.—Tabular view of training colleges and training centers.

Secondary education.—Inspection of secondary schools; the intermediate and leaving certificates.—Continuation schools.—Expenditure for secondary and technical education.

3. EDUCATION IN IRELAND.

System of national education (elementary).—Relations to government; local control; compulsory law; the merit certificate; enrollment and average attendance of pupils.—Teachers: Training, number, and classification. Expenditure.—Secondary education: Means of fostering; statistics.

Department of agriculture and technical instruction.—Scope and resources. System of instruction in agriculture fostered by the department: Itinerant instruction; agricultural schools and classes; the training of instructors and teachers; the central institutions and experiment stations.

Universities, colleges, and professional schools in Great Britain and Ireland: Statistics, current and comparative; notable events of the year.

Partial list of recent publications by the board of education (England).

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[a] For complete index of articles on education in Great Britain and Ireland in reports of this series from 1888–89 to 1903, inclusive, see Report for 1904, Vol. I, chap. xii, pp. 790–832; also Report for 1906, Vol. I, chap. 1, p. 1.

EDUCATION IN ENGLAND AND WALES.

INTRODUCTORY SURVEY OF CURRENT EVENTS.

The chief events of the year with respect to education in England and Wales are legislative acts and official regulations introducing important modifications into the administration of schools participating in the government grant or in the scheme and conduct of studies. For the understanding of these measures, reference must be made to the authorities intrusted with their execution. These are the central authority, namely, the board of education, and the local authorities for education, the county and county borough councils.

EDUCATION AUTHORITIES.

The board of education, which has taken the place of the former education department and the department of science and art, includes within its province elementary schools, technical schools, schools of art, and other schools and agencies for advanced education.[a] In February of the present year (1907) the board established a special department for the administration of education in Wales, under the control of a permanent secretary and a chief department inspector, each responsible directly to the president of the board.[b]

The local education authorities are the county and county borough councils (numbering in all 135). To these are added, for elementary education, the council of a noncounty borough having a population of over 10,000, or of an urban district having a population of over 20,000, unless these councils prefer to relinquish their powers with respect to education to the county authority. There are at present 137 autonomous municipal boroughs and 55 urban districts. The Isles of Scilly also have control of their own schools, making altogether 327 local education authorities in England and Wales.

The administrative councils named above became education authorities replacing the former school boards by the education act of 1902, but it was made the "duty of every council having powers as a local education authority, whether for higher education or elementary education, to establish an education committee or committees constituted in accordance with a scheme made by the council and approved by the board of education." The law especially provides that women shall be appointed on the said committees.

The law also requires that matters relating to the exercise by the council of their powers as to education, except the power of raising a rate or borrowing money, "are to stand referred to the education

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[a] The board of education was created by a law of 1899. The first two branches of the work are at present centered at Whitehall; the third at South Kensington. The entire administrative staff of the board is soon to be removed to the new buildings in Westminster.

[b] The new department for Wales will exercise, under the general direction of the board of education, the duties specified in Part III of the bill of 1906, providing for a council for Wales.

committee, and the council before exercising any such powers, are, unless in their opinion the matter is urgent, to receive and consider the report of the education committee with respect to the matter in question. The council may also delegate to the education committee, with or without any restrictions or conditions as they think fit, any of their powers as to education, except the power of raising a rate or borrowing money."

The board of education administers the Parliamentary grants for education, and to this end supervises the work of the schools aided, issues regulations determining the conditions upon which the grant may be received, and maintains an annual inspection of the schools sharing in the grant.

The local education authorities are charged with the administration of public elementary schools in their respective areas, and have also certain powers and duties relative to "higher" education. They receive and disburse the Government grants for schools and levy local taxes for the support of schools.

The overthrow of the former school boards and the concentration of the local control of education in the county and municipal councils was the special purpose of the law of 1902. By this action all grades of education—elementary, secondary, and technical—are brought under one and the same local authority. This is an advantage recognized even by those who desire to see elected school boards restored in the principal cities, and who are bitterly opposed to the provisions of the law of 1902, forcing denominational schools upon the local taxes.

NEW LEGISLATION.

It will be recalled that the bill of 1906 proposed no vital change in respect to the local education authorities; it was defeated solely on account of the failure of the House of Lords to agree to any basis for the treatment of sectarian schools acceptable to the great majority (Liberal) in the House of Commons. In addition, however, to this matter on which agreement was impossible, the bill of 1906 included many provisions which carried a majority vote in both houses. The education (administrative provisions) bill, introduced in the House of Commons February 28 of the present year, was intended to comprise these noncontroversial clauses of the bill of 1906.

With the single exception of a clause removing the 2-penny limit of rate (local tax) allowed for the purposes of education other than elementary,[a] all the important provisions of the bill were carried. It received the royal assent August 28, and thus takes its place as one

[a] This limit was imposed by the law of 1902. Clause 18 of the defeated bill of 1906 provided for its removal.

of the most important laws in the series that have gradually extended the operations of the educational system based upon the law of 1870.

The new law gives local education authorities the same powers in respect to the compulsory purchase of land for the purposes of higher education that they had under the law of 1870 in respect to the purchase of land for the purposes of elementary education; eases the burden of county council loans for education by extending the maximum period for repayment from thirty to sixty years; gives greater freedom to local authorities in respect to the support of private institutions for the training of blind and deaf children, and enables the local authorities to aid, by scholarships or bursaries, the instruction in public elementary schools of scholars from the age of 12 up to the limit of age (16 years) fixed for the provision of instruction in a public elementary school. With the consent of the board of education, however, this aid may be extended beyond the age of 16 years. The law provides also that after January 1, 1908, money may be expended in maintaining "for children attending a public elementary school, vacation schools, vacation classes, play centers, or other means of recreation during their holidays or at such other times as the local education authority may prescribe, in the schoolhouse or in some other suitable place in the vicinity, so far as the local education authority, in the case of a schoolhouse or place not belonging to them, can obtain for the purpose the use of the schoolhouse or place;" the law also makes it the duty of the local authorities "to provide for the medical inspection of children immediately before or at the time of or as soon as possible after their admission to a public elementary school, and on such other occasions as the board of education direct," and "to make such arrangements as may be sanctioned by the board of education for attending to the health and physical condition of the children educated in public elementary schools."

The growth of public sentiment with respect to compulsory school attendance is indicated by the fact that no opposition was excited by the clause of the law requiring children who do not reside within 2 miles of a school (the limit fixed by the education law of 1870) to attend school in case the local authority provides means of conveyance.

The law also authorizes the appointment of a registration council to arrange for a new alphabetical register of teachers with no discrimination between elementary and secondary grades. It is believed that this arrangement will meet the objections that proved fatal to the register authorized by law of 1899.[a]

A second important measure of the year was the inclusion in the education estimates of an item of £100,000 ($500,000) for new elementary schools. When the estimates were under discussion in the

[a] Board of Education Act, 1899 (62 and 63 Vict., C. 33).

House of Commons Mr. McKenna, president of the board of education, in reply to the inquiry of a member said:

> The chancellor of the exchequer has allowed £100,000 to be placed on the estimates with a view to enabling the board, as and when occasion requires and within the limits of this sum, to furnish the means for providing a public elementary school in cases where the only existing school accommodation is wholly of a denominational character, and a strong demand is made by the parents for an undenominational school.

The appropriations for the year (ending March 31, 1908) also include £691,000 ($3,455,000) for secondary schools, being an increase of £86,400 ($432,000) over the corresponding item for the previous year. The appropriation for other schools and classes (chiefly science and art) is £642,795 ($2,313,975), being an increase of £41,225 ($206,125).

The woman's qualification act, which was passed at the close of the session, admits women to the county councils and the municipal councils. Thus is restored to women the opportunity for such service as they rendered on the former school boards, the report of which service furnished the strongest arguments in favor of admitting them to the councils.

From this brief review of legislative measures, passed in the session of 1907, it will be seen that education in England has entered upon what may be characterized as an era of expansion; the powers of the board of education and of the local education authorities have been increased, and the public care for the general welfare of school children extended.

RECENT MEASURES OF THE BOARD OF EDUCATION.

During the year the board of education has been actively engaged in developing plans in accordance with its increased powers and responsibilities. Among the measures noted in the report of the board for 1906–7, the following are of general interest: (1) The establishment of a medical department "to advise and assist the board in carrying out their statutory duties in this regard; in giving direction as to the frequency and method of medical inspection and in considering and sanctioning such arrangements as may be proposed under the act by individual authorities;" (2) the reconstitution of the consultative committee, which has been increased from 18 to 21 members, care having been taken to fill the new places and the vacancies caused by resignations with persons representing various aspects of education that have hitherto had no direct representation in the committee;[a] (3) arrangements have also been made for raising the scale of grants in aid of secondary schools.

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[a] Among the new members whose appointment causes general satisfaction are Dr. M. E. Sadler, Mr. Marshall Jackman, headmaster of an elementary school in Walworth, and Miss Isabel Cleghorn, headmistress of the girls' department of an elementary school in Sheffield, the two last named being prominent members of the national union of elementary teachers.

Although administrative problems have long overshadowed all others pertaining to education in England, and have absorbed the chief energies of the authorities concerned in the direction and control of schools, nevertheless the board of education has been steadily endeavoring to deal in a comprehensive manner with matters of an educational character, such as the preparation of teachers, the conduct of different branches of study, the means of promoting the ethical and social development of pupils, etc.

By its settlement of the subordinate problems of general policy, the law of 1907 has given a new impulse to the consideration of these purely professional problems. The activity in this respect is indicated by the partial list of recent official documents and special reports issued by the board of education, appended to this chapter.

REGULATIONS RESPECTING TRAINING COLLEGES AND SECONDARY SCHOOLS.

The measures of the board that have excited the most animated discussion during the year are the new regulations relative to the training colleges for teachers, which go into effect in 1908, and the regulations for secondary schools. The excitement caused by the publication of the former centers in the fundamental changes in the conditions for admission to training colleges. With respect to these changes the official report says:

In the past the acceptance or refusal of candidates has been left almost entirely in the hand of the college authorities, with the result that access to a large majority of the residential colleges has been restricted to students who belong to some particular denomination and have satisfied the authorities as to their knowledge and acceptance of the tenets of that denomination. With a view to throwing open as far as possible the advantages of a course of training in colleges supported mainly from public funds to all students who are qualified to profit by it irrespective of religious creed or social status, the board have laid down that the application of a candidate may in no circumstances be rejected on the ground of religious faith or by reason of his refusal to undertake to attend or abstain from attending any place of religious worship, or any religious observance, or instruction in religious subjects in the college and elsewhere; nor on the ground of social antecedents or the like. In order to secure the effective observance of this regulation the board have required that the official principal or correspondent of every training college or hostel in receipt of a grant shall keep for our use a register of candidates for admission showing their qualifications, so far as are known, in the order in which the applications are received and opened, no application being eligible for consideration which is received before the 1st of August of the year before that in which admission is desired. The board do not, however, in any way intend to suggest that priority of application must necessarily govern the admission of candidates, or to debar the authorities of the training colleges from giving preference on grounds other than religious creed or social status provided they are able in each case to show adequate reasons for their selection. It will, therefore, be open, for instance, to the training college authorities, in the future as in the past, to give preference to applicants on grounds of proficiency in secular subjects as tested by examination or other evidence, or to applicants coming from their own areas or from areas of local education authorities who have contributed to the cost of the establishment or maintenance of such colleges. It is the board's desire to allow the authorities of

the training colleges as much freedom in selection as is possible consistently with the terms of the regulations, provided there is no reason to suppose in any case that the liberty of choice thus given is being used in order to give a preference on religious or social grounds.

The authorities of training colleges and hostels maintained from public funds will not be permitted under the new regulations to impose on candidates an examination, either written or oral, in addition to such examination as may be approved by the board as qualifications for recognition. It is not, however, proposed to prohibit the holding of an interview provided an examination is not included and provided no candidate is questioned as to his religious belief or as to matters which would not be deemed reasonable grounds for refusal of admission within the terms of the regulations.

The board are advised that certain of the existing training colleges are governed by trusts which prohibit the admission of any students not belonging to a particular denomination, or impose other requirements which conflict with the new regulations. It will be for the authorities of the college to decide whether, in such cases, they are desirous of continuing to receive grants from public funds, and in that event to obtain an amendment of their trusts if needed. The board will be willing to afford to the governors of any college who apply to them every assistance in their power in establishing amending schemes to enable them to comply with the regulations, and do not anticipate that any serious difficulty need arise under this head.

In furtherance of the principle that training colleges and hostels maintained from public funds shall be, where possible, free from denominational tests and restrictions, whether upon the governing body or upon the teaching staff, it is laid down that no institution not recognized as a training college or hostel before the 1st of August, 1907, will be so recognized unless it is either provided by a local education authority or conducted by a body of governors acting under an instrument approved by us. Such an instrument must not require a majority of the governing body or any member of the teaching staff to belong or not to belong to any particular denomination. It is further required that in new training colleges or hostels no catechism or formulary distinctive of any particular religious denomination may be taught except to students whose parents or guardians have requested the governors in writing to provide such instruction. In such cases it will be within the discretion of the governors, if the instrument under which the college or hostel is governed empowers them to do so, to comply with such request and to provide such instruction out of funds other than grants made by the board or by a local authority.

It may be added that while the board can not hope to meet objections which have been taken on point of principle, they have every hope that certain administrative difficulties which have been placed before them may by mutual cooperation between the board and the training colleges be surmounted.[a]

The new regulations for secondary schools, as stated in the report—

Have been framed with the view of encouraging, in schools claiming State aid, freedom from denominational restrictions and requirements, representative local control, and accessibility to all classes.

In order to obtain the full scale of grant, the instrument, of whatever nature, under which a school not provided by a local education authority is governed (*a*) must not require any members of the teaching staff to belong or not to belong to any particular denomination; (*b*) must not require a majority of the governing body (whether in virtue of their tenure of any other office or otherwise) to belong or not to belong to any particular religious denomination; (*c*) must not provide for the appointment of a majority of the governing body by any person or persons who, or by any body the majority of whom, are required (whether in virtue of their tenure of any other office or otherwise) to belong or not to belong to any particular religious denomination.

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[a] Board of Education. Report for the year 1906–1907, pp. 55–57.

No catechism or formulary distinctive of any particular religious denomination may be taught in the school except in cases where the parent or guardian of any scholar requests the governors in writing to provide for the scholar religious instruction in the doctrines, catechism, or formularies distinctive of any particular denomination. In such cases the governors may, if they think fit, and if the instrument under which the school is governed requires or does not prohibit the giving of such instruction in the school, comply with such request and provide such instruction accordingly out of funds other than grants made by the board of education or by any local authority.

The governing body of a school not provided by a local education authority must contain a majority of representative governors, appointed or constituted by local representative authorities or elected by popular local constituencies, and the appointment and dismissal of the head master or head mistress of the school must be in the hands of a governing body so constituted, and must not be subject to any further approval except that of a local representative authority or combination of local representative authorities. Provision is, however, made for cases in which appointing or electing bodies do not think fit to exercise their powers, and consequently the governing bodies do not actually contain a majority of representative governors.[a]

The above citations will suffice to show that the regulations for both classes of institutions—training colleges and secondary schools—adhere to the vital principle of the defeated measures of 1906, namely, that public control shall follow public funds. The discussion excited by this policy has obscured for the time the more important educational purposes of the regulations. They are in fact the outcome of a comprehensive plan to increase the scope of secondary education, to bring about closer relations between secondary schools and the training colleges, with a view to relieving the latter from a large part of their academic work, and thereby strengthening the professional training. The regulations indicate further the desire to promote, by the means adopted for the education of teachers, the unity of secondary and elementary education.

PRELIMINARY EDUCATION OF ELEMENTARY SCHOOL TEACHERS.

This latter purpose is emphasized by the new regulations for "the preliminary education of elementary school teachers." As is shown by the prefatory memorandum to this document, the existing system of pupil-teacher training, under which the youthful candidate is engaged a part of the time in teaching while attempting to pursue a course of study, is to be replaced by a plan which provides for his continuous education up to 17 or 18 years of age, and defers his practical training to a later period. This is to be accomplished by placing the intending teachers in secondary schools, recognized for that purpose by the board of education, and providing for their expenses by a system of scholarships or bursaries. The young candidate will hereafter be known as a bursar. The Schoolmaster, commenting on this plan, says:

A bursar is a p. t. (pupil teacher) who is not a p. t.—i. e., he has been sent to a secondary school with the intention of becoming an elementary teacher, but instead of spending his time during his pupil teachership partly in school and partly in work

[a] Board of Education. Report for the year 1906-7, pp. 66–67.

as a teacher student, he remains continuously in school as a pupil. As he is not a working teacher, he can not be paid a salary by the local authority. But where a maintenance grant is made to him by the local authority, the board of education will pay one-half of this up to a maximum of £5, the other moiety coming from local funds—in addition to continuing the grants now made in aid of the education of intending elementary teachers. This provides a continuous education until such time as the bursar is ready to enter a training college. * * *

This is a tremendous step, and, we think, a step in advance. Continuity of education up to the age of 17 or 18 is thus assured, a thing which in itself is admirable. There remains the question of practical training. For ourselves we have never set great store on the scraps of practice gained in spasmodic attendance on the day school—whether in the form of days, or half days, or even a whole term—where these attendances alternated with study. When free from the pressure of examinations, more can be done in a three months' steady practice under close and expert supervision than by almost any number of isolated attendances. So that we ourselves have no fear that the average of teaching skill in the young primary teacher is going to be lowered, provided the training colleges rise to the task.

REPORT OF THE CONSULTATIVE COMMITTEE UPON HIGHER ELEMENTARY SCHOOLS.

In this connection should be mentioned the recent report of the consultative committee upon higher elementary schools.[a] The special problem referred to the committee was the determination of the nature and amount of that special instruction which distinguishes the higher elementary school from the upper part of the ordinary elementary school. While the curriculum must be left to local consideration in the first instance, in each case it must be approved by the board in order that the school should secure recognition as a higher elementary school for the purposes of the government grant. The requirements of the board have, therefore, the determining influence in shaping the studies and aims of the school.

In the report referred to the committee explain that "a higher elementary school, as contemplated by the code, would provide education, between the ages of 12 and 15 years, for the brighter children who have attended previously an ordinary public elementary school, and who will, as a class, complete their day-school education at the age of 15, and thereupon go out into the world to earn a living in the lower ranks of commerce and industry. For such children there must naturally be a kind of education that is likely to make them efficient members of the class to which they will belong." Throughout the report is maintained the idea of a class of schools distinctly marked off from recognized secondary schools. For this reason, although it is exceedingly suggestive in respect to many pressing problems, the report has been severely criticised as part of a general scheme fostering social rather than educational distinctions in the classification of schools. The opposition to this policy was manifested during the debate in Parliament on the education budget

[a] Issued by the board of education, 1906.

for the current year, and in many public conferences on education. The president of the National Union of Teachers for 1907, in his inaugural address at the annual meeting, said:

> Since the time of the Cockerton judgment endeavors have been systematically made to conserve the public supply of higher education as a social rather than as a national provision. The officials of the board have been far more concerned about regalvanizing existing grammar schools than about developing good municipal secondary education. Let me say that some of the work of the secondary branch has been distinctly good. It is an excellent thing to provide increased grants from the treasury for efficient secondary schools, to set up a four years' course from about the age of 12, to give greater liberty of curriculum, and to require a certain proportion of newly appointed teachers to have gone through a recognized course of training. But concurrently with these improvements there has been a deliberate attempt to "fend off" from the secondary schools proper all but a few of the children of the workers, and to secure the larger secondary grants for schools in most cases already charging a high fee, and not seldom endowed with money.

He urged that the board should act up to the idea expressed in its own report, namely: "The limit of useful State control is to be found at the point where it ceases to be an expanding and stimulating force and tends to fetter or sterilize."[a]

In the parliamentary debate above referred to Mr. Pickersgill (Bethnal Green S. W.) said that—

> He wished to criticize the action of the secondary schools branch of the board of education, which had for many years been marked by an undemocratic spirit and by a want of sympathy with the desire to place higher education within the reach of all children who were qualified or anxious to receive it. That unsympathetic spirit of the secondary school management had culminated in the publication under peculiar circumstances of a report of the consultative committee. The board of education had referred to that committee certain specific questions relating to higher elementary schools; but the committee had gone far beyond the terms of reference, and had seemed to lay down in their report what they thought should be the educational future of the children of the poor. They seemed to suggest that secondary schools should be kept exclusive and select, and that very few, if any, of the children of the poor should be admitted to them. It appeared to be suggested to parents of those children and to sympathetic local authorities who desired to erect secondary schools that their ambition should be limited to the higher elementary school. * * *
>
> He urged that the policy of the education department should be to encourage as far as possible the common education of all classes in elementary schools, and to secure that the secondary schools were in direct relation with the elementary schools. In that respect he declared Wales was far ahead of England.[b]

It should be explained that the Welsh intermediate (secondary) schools were organized into a system based on a complete scheme of provision for each county in Wales by an act of 1889,[c] which extends also to Monmouthshire, England. The distinguishing feature of this system is the purpose to make every school accessible to every class of the people. From the beginning the intermediate

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[a] Cited from the Schoolmaster of April 6, 1907, p. 692.

[b] Parliamentary Debates, 4th series (2d sess. of the 28th Parliament), third volume of session (March 13–27), 1907, pp. 91–92.

[c] The Welsh intermediate education act, 1889.

schools have all been subject to the same supervision, both locally and centrally, and the needs and desires of the people themselves with respect to them have found expression and have excited a profound influence upon the schools, by means of the Central Welsh Board created by the law above referred to. These schools therefore present a uniform type, in striking contrast with the variety, individuality, and historic independence of the English secondary schools.

MEASURES PERTAINING TO THE ORDINARY ELEMENTARY SCHOOLS.

As regards the ordinary elementary schools, the recent efforts of the board have been directed to matters that are now exciting universal attention. Measures have been taken to raise the general level of education in rural districts and to utilize existing rural school endowments for the development of higher grades or departments.

SPECIAL AID TO SMALL DISTRICTS.

In this connection it should be explained that, in addition to the grants common to all elementary schools fulfilling the conditions for the same,[a] particular aid is given to schools in small districts, as indicated by the following statistics:

Special grants for schools in areas with small populations.

	1905–6.	1904–5.	1903–4.
Number of schools in respect of which the following special grants were paid:			
£15 (area with population not exceeding 200)	1,652	1,622	1,569
£10 (area with population exceeding 200, but less than 300)	1,790	1,790	1,795
Total	3,442	3,412	3,364
Number of schools in respect of which special grant was paid at rate of £10 per annum (population of area being less than 500, and special staff conditions satisfied)	5,454	5,210	4,624

SPECIAL BRANCHES OF INSTRUCTION.

As a means of systematizing the instruction in domestic science (including cookery and laundry work), the new regulations require, as a condition for obtaining the special grant allowed for these sub-

[a] The general grants are as follows:

(1) Grant in lieu of fees (elementary education act, 1891) at the rate of 2s. 6d. per pupil in average attendance for the previous school year.

(2) Annual grant at the following rates per unit of average attendance: Infants' departments, 17s.; departments for older scholars, 22s.

(3) Special subject grants, as indicated in the text.

(4) Annual grants in respect of instruction given to children in higher elementary schools, at the following rates for each unit of average attendance:

		Amount.
First-year course	shillings	30
Second-year course	do	45
Third-year course	do	60
Fourth-year course (when sanctioned)	do	60

jects, that every pupil taking one or all of them shall be registered at the beginning of the course selected. Provision has been made for improving nature study by combining it with school gardening, including fruit culture, bee keeping, etc. Dairy work has also been restored to the course of elementary study, as a subject for special grants.

The recent progress in these special branches is indicated by the following statement of the grants allowed for the same:

Instruction in special subjects.

	1905–6.	1904–5.	1903–4.
Number of schools or departments [a] in respect of which grant was paid for instruction in—			
Cookery [b] ..... girls..	5,202	4,761	3,743
Laundry work ..... do....	1,274	1,185	793
Household management ..... do....	367	327	221
Dairy work ..... do....	0	0	0
Handicraft ..... boys..	2,691	2,498	1,847
Gardening ..... do....	749	579	394
Cookery [b] (in seaport towns) ..... do....	6	3	5
Number of scholars on account of whom grants were paid for instruction in—			
Cookery ..... girls..	249,358	237,962	204,800
Laundry work ..... do....	60,391	56,663	38,833
Household management ..... do....	10,430	8,270	12,821
Dairy work ..... do....	0	0	0
Handicraft ..... boys..	108,537	102,655	85,911
Gardening—			
Short course ..... do....	5,473	3,273	2,379
Long course ..... do....	5,743	5,086	3,316
Cookery (in seaport towns) ..... do....	26	135	238

[a] The figures for 1903–4 give the number of departments and those for 1905–6 the number of schools. The figures for 1904–5 consist, in an unascertained proportion, partly of the number of departments and partly of the number of schools.

[b] A certain number of schools or departments in respect of which grant was paid for cookery for both boys and girls are included under each of these heads, viz: 6 in 1905–6, 1 in 1904–5, and 1 in 1903–4.

EFFORTS TO IMPROVE PHYSICAL TRAINING.

The year has been marked further by a continuance of special efforts to improve the physical training of pupils. In their report for 1903–4 the board included a model syllabus of physical exercises, and this was followed the next year (1905) by a special chapter on physical training in the volume of suggestions for the consideration of teachers. The official regulations for public elementary schools (code) for 1904 provided that "if suitable arrangements can be made, a part of the afternoon may be devoted to cricket, football, hockey, and rounders for the boys, and similar appropriate games for girls."

The report of the board for the current year (1906–7), after reviewing the measures already taken to promote physical training in the elementary schools, says:

> It is very desirable that suitable recreative exercises should be given on several occasions during each day to each of the classes in every school, and if this is to be done, and done intelligently and consistently with the principles underlying the more serious physical training, the work must be taken by the regular staff, who must know enough to recognize which children should be excused and for whom the exercises need modification. That is why it is essential that the physical training

given in training colleges should be far more thorough and receive more attention than it often does at present.

But it is also declared that—

When all that is possible has been done in the way of equipping the teachers to take their proper part in this fundamentally important work in the schools, it will certainly prove necessary for each area to have a small highly skilled staff of physical instructors, who will visit the schools from time to time, will take some of the more important training themselves, will give supplementary courses for teachers who for one reason or another are not yet up to the proper standard of acquirement, and will be able to assist them tactfully in dealing with difficult or doubtful cases.

With respect to the relation of the problem of physical training to medical inspection, the report continues:

But the problem is not solved by putting every class in the school through a course of physical exercise, however thorough or complete. Some children need to be specially treated by duly adjusted movements; others need varying proportions of mental and physical exertion, and herein lies one of the most practical aspects of the medical inspection which the new act requires each local education authority to provide. Nor is this all. Unless the home conditions can be improved it is of relatively little use to improve the conditions during the five hours' school out of the total twenty-four in the day. This is why the function of medical inspection in the school becomes so intimately interwoven, as the board have pointed out in their Circular 576,[a] with the functions of the medical officer of health.

By some means or other the national understanding of a healthy way of life must be increased, and the most hopeful point of attack seems to be the inculcation of simple rules of health and the constant practice of them in the schools. A child who is taught to be clean and to breathe fresh air for five hours in the day will make for righteousness in those ways at home, for the influence of the little ones upon even the worst parents is a reality we can not afford to neglect.[b]

Intimately connected with the attention to the home conditions of school children included within the medical inspection authorized in the law of 1907, is the supply of meals for school children by the local authorities as provided by the law of December 21, 1906.

Except in cases where it is desired to spend money from the local taxes upon the purchase of food, or to obtain the board's approval of plans for a proposed dining room or cooking center, it is not necessary that the local authorities should notify the board of their desire to take action under the law referred to; hence no general report of this work throughout the country is at present available. The board report, however, that seventeen authorities in England, including the councils of several of the most important boroughs in the country, have been authorized to expend moneys from the rates in respect of the purchase of food, and three authorities in Wales have been similarly authorized.

THE WORK OF LOCAL AUTHORITIES.

The above survey of current events pertaining to education in England relates almost exclusively to the work of the Government in

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[a] Circular 576, an important memorandum relative to medical inspection.

[b] Board of Education. Annual report, 1906–7. p. 16.

this respect. It should not be forgotten, however, that such a survey represents only one aspect of this great interest. For the time being, indeed, it is the most important aspect, because the Government action reflects the will and purpose of the leading communities of the country, the great centers of population where public opinion is most readily crystallized, and where the pressure and significance of the forces that are urging society onward are most keenly felt. It is impossible within the limits of the present chapter to suggest even what is being done by the chief municipalities of England to insure, so far as education may, the intelligence and the efficiency of their citizens. Every purpose recently sanctioned by Government has already been made a subject of practical effort in one or more of these centers. Before the passage of the recent law providing for these services, medical inspection of schools had been organized by 6 counties, 35 county boroughs, 31 boroughs, and 13 urban districts; the feeding of school children has been carried on in London, Manchester, Birmingham, Liverpool, Bradford, Sheffield, and other cities, chiefly by voluntary agencies acting in direct relations with the education authorities; and committees charged with the duty of promoting the welfare of children and youths after leaving school have been formed by the education authorities in London and Birmingham. In this connection, also, may be recalled the great work accomplished by the former school boards in organizing higher grade schools, thus anticipating the movement for fostering "higher education" and coordinating the diverse institutions comprised under that head, which for the time is the most important problem before the board of education.

As an index to the extensive work for which the local authorities are responsible, two tables presenting statistics of the public elementary schools in the eight county boroughs of England having more than 300,000 inhabitants have been included in the statistical survey which follows (Tables 9 and 10).

The independence of the local education authorities in respect to the conduct of their schools is strikingly illustrated by the contest which took place during the year in the West Ham County borough over the salaries of teachers. The council determined upon a salary schedule which reduced the rates under which a large proportion of the teachers had been engaged for a definite period. The teachers resisted the injustice; the National Union took up their cause, and after a prolonged and bitter struggle, lasting from Easter until Michaelmas, a compromise was effected by which the rights of the teachers were substantially maintained.

English law simply obliges local authorities to establish and maintain schools, and lays down the conditions upon which they may share in the appropriations from the public treasury. As regards

teachers, the Government requires that the head teacher of a school shall be certificated, that the school shall have a sufficient staff, and that teachers shall be employed under written agreements or the minute of a local authority. All other conditions affecting salary and tenure are arranged by the local authorities.

FORCES SHAPING EDUCATION IN ENGLAND.

By reason of the control of the parliamentary grant for schools and the consequent necessity of issuing specific instructions as to the conditions for obtaining the grant, the board of education has naturally become throughout the country a great unifying and directive force in education. At the same time the high degree of independence possessed by the local education authorities, and their ever-growing sense of responsibility in this matter, under the increasing pressure of local public opinion, stimulate the closest scrutiny of all regulations that issue from the central office. As a result of the efforts and experience of the past forty years, the chief cities of England—London, Manchester, Birmingham, Sheffield, etc.—have developed educational leaders whose influence and opinion must be weighed in connection with every proposed measure. The interest in educational policies is intensified by the jealous watchfulness of opposing interests—the interests of provided and of nonprovided (parochial) schools in the field of elementary education, and of endowed schools and the higher grade of public schools in the field of secondary education. Innumerable associations of teachers, school officers, school managers, etc., maintain close watch on every action of the central and of the local authorities pertaining to their common interest; hence it has come to pass that at this time there is more general discussion in England of education as a national problem and a social force than in any other country of the world. Moreover, this constant agitation of the subject has given rise to vigorous treatment of the purely professional problems of education. This latter tendency is noticeable in the recent conferences of the National Union of Teachers and of the North of England Education Conference. The former society has always been particularly active in safeguarding the rights of teachers,[a] and the latter, while maintaining an active campaign in behalf of liberal administrative policies, includes also in its programme questions of principles and methods, and for their exposition seeks the services of the ablest specialists.[b]

THE SHIFTING CURRENT OF THOUGHT.

This deeper conception of educational values has been stimulated by the recent creation of an educational section in the British Asso-

[a] For report of the annual conference of the National Union of Teachers held at Oxford, April 1–5, see The Schoolmaster, Vol. LXXI, No. 1840 (Apr. 6, 1907), supplement.

[b] For report of the sixth annual meeting of the North of England Conference, see The School Government Chronicle, Vol. LXXIX, No. 1926 (Jan. 11, 1908), pp. 37–92.

ciation. The purpose of this section was emphasized in the meeting for the current year by the address of the president of the section, Sir Philip Magnus, who, under the title "Is there a science of education?" considered the relation of scientific method to the investigation of problems of education.

While admitting that education is not sufficiently advanced to justify its claims to be recognized as a science in itself considered, Sir Philip Magnus declared that—

> We are able to affirm that the methods of science applicable to investigations in other branches of education are equally applicable to the elucidation of educational problems. To have reached this position is to have made some progress. For we now see that, if we are ever to succeed in arriving at fixed principles for guidance in determining the many difficult and intricate questions which arise in connection with the provision of a national system of education or the solution of educational problems, we must proceed by the same methods of logical inquiry as we should adopt in investigating any other subject-matter.[a]

The gradual shifting of the current of thought, from administrative questions to those pertaining to principles and methods, was indicated also by Doctor Sadler in an address before the annual meeting of the North of England Educational Conference already referred to, which address is here cited at length:

> As a preface, therefore, to our debates during the past two days, I should like, with your leave [said Doctor Sadler], to attempt within a few minutes a review of the change in the spirit which has come over English education during the past ten or fifteen years. It seems to me that the most important changes are due to the rise of modern science and to the development of scientific method in thinking about things—method which is dispassionate, penetrating, and comparative. Science has made us realize as never before the importance of hygiene and of the physical nurture of children, both in school and in the home. We are only at the beginning, it seems to me, of the educational revolution which this change in mind implies. Science has led to the establishment of suitable schools for the mentally or physically defective, and it may lead us to a yet further classification of pupils according to natural aptitude and temporary retardation. The study of the brain has shown the educational value of hand work, and scientific psychology has thrown light upon the critical nature of the years of adolescence, and is making us realize the unwisdom of allowing boys and girls, during those years which immediately follow the too early closing of the day school course, to be without further systematic educational care. The theory of evolution has helped us teachers to realize the need for adjusting the subject-matter of instruction to the successive stages of a child's intellectual and moral development, and I hope that the change in the end will melt the icy barrier between the kindergarten and the upper school. The study of evolution has changed the perspective of our history teaching, and it is significant that, in the remarkable memorandum which the Scotch education department has just put forward on the study of history, the bearing of evolution on our historical teaching is put into the foreground. I think, too, that this form of scientific thought is likely to transform some of the traditional kinds of religious instruction. Applied science has led to remarkable developments of technological training, and not least in that part of the country represented here to-day; and I notice, my lord, that when you were speaking of the way in which we might spend the brief hours of leisure left us you first suggested that we should place ourselves under Professor

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[a] The Educational Times, Sept. 2, 1907, p. 400.

Ripper's care in the technological department of the university. Scientific social investigation is pressing upon us in England the need for special educational and industrial discipline for the feckless and the idle; and scientific analogy (I do not think it is more), by making men think of the community as a social organism, has strengthened the movement toward government control over individual waywardness and inefficiency. [Applause.] That leads me to the second great group of changes which we have witnessed. I mean those connected with the very rapid growth of State influence in English education. Every part of our education is now influenced, directly or indirectly, by the policy of the Government and by the experienced administrators in Whitehall. But the power of the local authorities has also grown, and what you may call the national principle and the cantonal principle are struggling together for the mastery. I hope that in the end they will settle down, as the Scotch considered should be the case with even two greater institutions—in coordinate jurisdiction and mutual trust. [Laughter.] But the movement in favor of the intellectual supervision (I prefer the word "supervision" to "control")—the intelligent public supervision of all schools from Eton to the kindergarten—has been accompanied by a growing sense of the value of individuality in education. This current of thought toward individuality has shown itself most clearly in the successful movement for the education of girls and women, the strength of which has been largely due to the just desire felt by women for better opportunities for the development of their personality and powers through intellectually thorough courses of training, planned to fit them for various callings in life, not only domestic, but administrative. The same movement toward individuality shows itself in the increased value set upon art and poetry in education, because art and poetry cultivate the imagination and develop individuality of thought and feeling. [Applause.] And thirdly, there has been a great change in the social outlook in English education. The old idea was that every class in the community should have its own educational institutions, those for the poor being a matter of charity. Now this class theory is still strong in England under the surface, but it seems to be losing part of its power. I want to speak of it with great respect. On the snobbish side it is despicable; but it seems to be essentially near to the real truth of things in its belief that the school ought to train you for your work in life. What we have to do is to disentangle what is snobbish and vain and silly in it from that which is essentially and eternally true in it. Now a change has come about through the formation of a new middle class in England by the rise of the skilled artisans. These men and women realize the value of education, and desire that their children should have a better chance in life than they themselves enjoyed, and that is really a new thing in English life. The old view was, "What was good enough for me is good enough for Tommy." If I judge them rightly, this new middle class dislike any kind of charitable patronage in the schools to which they send their children. They are seizing the opportunities offered to their children by the system of scholarships upon which Mr. Bompas Smith and I have reason to think about £400,000 is now spent annually in England alone. But, again, if I judge them rightly, the new middle class of artisans feel that our schools should do more to train boys for skilled industrial employment and girls in housecraft, and both for the duties of citizenship. And this training for citizenship will be secured partly by means of direct instruction, but much more through the activities and responsibilities of the corporate life of each school community, and in developing this corporate life in every school, the newly founded municipal and county secondary schools, and an increasing number of public elementary schools are learning much from the older traditions of English public schools. Now, this great volume of change is, in my judgment, producing a very rapid advance in English education, but has also made us realize the defects which we must endeavor to remove, and these, with your leave, I should like to summarize. The large classes in many urban schools make individual teaching almost impossible. It is not possible for any teacher to individualize more than 35 pupils at once, and

I think that 30 is the right limit, and a lower limit for little children. Then the curriculum is overcrowded; the majority of our children in England leave school at a too early age; the social and, as I think, the economic results of the half-time system in the textile districts are deplorable [applause], and with regard to the tendency in large schools, which are established for clear reasons of economy, to burden the head teacher with administrative and clerical duties which absorb energy and power of thought that ought to be given to educational influence amongst the pupils, I would urge that local authorities might do much to increase the powers of head teachers if they would give them some form of skilled clerical assistance in the preparation of necessary returns. Then multitudes of children in England suffer in health from insufficient sleep at home. More hand work and more individual study are needed in the higher classes of many elementary schools. Day continuation schools, with courses of study of a practical but intellectually stimulating and humane kind would further the interests of English industry, and would lessen the alarming percentage of young men amongst the unemployed. In nearly all English schools the teaching of the mother tongue is poor. The intellectual vigor of our higher secondary education is impaired by premature specialization in classical scholarship, and especially by the too early beginning of Greek. The higher education of women seems to me to be disproportionately concerned with the recruiting of the teaching profession. Is it not desirable to provide some course of training for women which would prepare them for administrative posts and for a wider range of social service? But the welfare of any educational system depends chiefly, apart from the earnest desire and care of the parents, upon the alert efficiency and pastoral gift of the teachers. At present most teachers can not look forward to a suitable competence in middle life, and the prospects of men teachers in our middle secondary schools are lamentable, and call for immediate improvement. It is patent that these things, which are more or less urgent, will involve considerable further expenditure, and the financial difficulty is perhaps the greatest which confronts us. To some extent, I admit, this would be lessened by a growth of the belief in the need for improved education. Once convinced of its value, England will find that she can afford to spend far more than she spends at present on her schools. But the rural districts, which are the reservoirs from which the towns draw new vigor of life, can not afford to provide under present arrangements the educational opportunities which country-bred children should receive. In view, therefore, of the need for united effort for educational improvement in the national interest, I would venture to conclude with the expression of the hope that a way may be found of lessening, on lines of give and take, the religious controversy which threatens to divide the friends of education into two contending parties.[a]

In this connection should be mentioned one of the most remarkable events of the year, namely, the Imperial Conference on Education, organized by the League of the Empire, and assembled during the time of the visit of the Colonial Premiers in London (May 25 to June 1). The topics considered by this conference related almost exclusively to the interests of the British Empire, namely, the mutual recognition of teachers' certificates in the different divisions of the Empire; the interchange of teachers and inspectors; the cooperation of the universities with a view to establishing equivalence of degrees.

Incidentally, however, ideas of world-wide significance—of education as a force making for universal peace, and of education as an essential force in empire—were brought out in these discussions.

[a] The School Government Chronicle, Vol. LXXIX, No. 1926, Jan. 11, 1908, pp. 37–92.

The vice-chancellor of Oxford University, discussing the conference as a step toward making the ideal of the British Empire a work of reality, expressed the belief that it was "just now in education, in the schools, and in the universities, that there was most to be done to advance the Empire." "Empire," he said, "the largest combination and cooperative human attempt which had hitherto been made required, more than any other work, education, and education on common lines. The common heritage of our race, its history, its literature, these could only be made the common property of the Empire by education. The different parts and possibilities of the Empire could only be made present to each other through education. * * * When they turned to the universities, which it was more particularly his province to represent, they moved from the future to a certain extent to the past. It was for the universities to organize the teaching of science, both of natural science and the science, if they might so call it, of humanity; to consider how to present and bring home the truths of physical and social law; to propose and to solve economic problems; to develop the lessons of the empires of the past; their inception and their growth, their decline and fall."[a]

STATISTICAL SUMMARY.

The extent and the varied character of the supervisory duties of the board of education are clearly indicated by the latest statistical report, which brings the official record down to August 1, 1907.[b] The following summaries present briefly the salient particulars of this record.

ELEMENTARY SCHOOLS.

The total registration on the last day of the school year 1905–6, in the several classes of schools comprised under the head of elementary, was 6,022,851. Of this number, 5,984,590 were in the ordinary public elementary schools, and 8,453 in the higher elementary schools, or a total of 5,993,043 pupils in schools corresponding approximately to the public schools of this country.

Detailed particulars of the various schools classified as elementary are presented in Tables 1 and 2. Table 3 gives additional data relating to the ordinary public elementary schools. The average enrollment in the latter, for the entire year, was 6,031,806, an excess of 47,216 over the number of pupils present the last day of the school year. This average was equivalent to 17.66 per cent of the population. The average attendance maintained was equivalent to 88 per cent of the average enrollment. The current expenditure for this class of schools, viz, $79,898,288 (Table 5), estimated on the average

[a] Cited from the Schoolmaster, June 1, 1907, p. 1089.

[b] Board of education. Statistics of public education, England and Wales, 1905–6–7, an appendix to the annual report of the board for 1906–7.

enrollment, gives a per capita of $13.34; estimated on population, a per capita of $2.35. The teaching force of these schools numbered 174,079, of whom 84,274, or 48 per cent, were certificated. According to the statement of the board in their annual report for the year, the average salaries now paid to teachers are as follows:

Salaries of teachers in ordinary public elementary schools.

Class.	Head teachers.				Assistant teachers.			
	Men.		Women.		Men.		Women.	
	Average salaries.	Equivalent in United States currency.	Average salaries.	Equivalent in United States currency.	Average salaries.	Equivalent in United States currency.	Average salaries.	Equivalent in United States currency.
	£. s. d.		£. s. d.		£. s. d.		£. s. d.	
Certificated	163 12 2	$795.13	112 17 7	$538.79	116 4 1	$554.73	84 17 0	$412.23
Uncertificated	78 0 7	379.22	63 15 7	309.96	66 14 11	324.38	53 7 2	259.31

The total number of male head teachers was 13,642. Of this number, more than 500 received salaries above £300 per annum. The number of women head teachers was 17,617, of whom only 16 received salaries above £300.

The average salary of 15,498 certificated male assistants, as indicated above, was £116, but more than 2,000 of these were in receipt of salaries exceeding £150. The average salary of the 36,787 certificated female assistants was £84, of whom only 100 were being paid more than £150.

TABLE 1.—*Number of public and other elementary schools recognized on 1st August, 1906, with their accommodation.*

	Council schools.		Voluntary schools.		Total.	
	Number.	Accommodation.	Number.	Accommodation.	Number.	Accommodation.
Ordinary public elementary schools:						
Maintained by local education authorities	6,980	3,520,093	[a]13,487	[a]3,492,432	20,467	7,012,525
Attached to boarding institutions, and not maintained by local education authorities (education act, 1902, section 15)	.....	.....	62	17,382	62	17,382
Higher elementary schools:						
New type	3	747	2	472	5	1,219
Old type	28	9,693	1	290	29	9,983
Schools for blind children	19	691	18	1,330	37	2,021
Schools for deaf children	35	1,959	15	2,005	50	3,964
Day schools and classes for defective children	169	10,470	.....	.....	169	10,470
Boarding schools for defective children	1	65	5	365	6	430
Boarding schools for epileptic children	1	42	3	180	4	222
"Certified efficient" schools	.....	.....	78	10,425	78	10,425
Total	7,236	3,543,760	13,671	3,524,881	20,907	7,068,641

[a] The denominations of the voluntary schools which are included in these figures, according to the nature of the religious instruction given, were as follows:

	Church of England schools.	Wesleyan schools.	Roman Catholic schools.	Jewish schools.	Undenominational and other schools.
Number of schools	11,377	345	1,064	12	689
Accommodation	2,743,876	129,358	411,360	11,358	196,480

TABLE 2.—*Number of scholars of various ages on the elementary school registers on last day of school year (statistical year 1905–6).*

	Under 3.	3–5.	5–7.	7–12.	12–15.	15–16.	16 and over.	Total.
Ordinary public elementary schools:								
Scholars under instruction as—								
Infants	.....	497,254	1,213,776	298,813	164	.....	.....	2,010,007
Older scholars	.....	6	58,751	2,856,310	1,063,794	5,475	147	3,984,483
Higher elementary schools:								
New type	.....	.....	.....	26	644	57	22	749
Old type	.....	.....	.....	1,437	5,789	442	36	7,704
Schools for blind children	.....	.....	78	631	565	175	30	1,479
Schools for deaf children	.....	.....	132	1,546	963	372	61	3,074
Day schools and classes for defective children	.....	.....	105	6,574	2,648	283	5	9,615
Boarding schools for defective children	.....	.....	.....	69	40	13	.....	122
Boarding schools for epileptic children	.....	.....	.....	67	72	25	.....	164
"Certified efficient" schools	.....	383	851	2,787	1,368	65	.....	5,454
Total	.....	497,643	1,273,693	3,168,260	1,076,047	6,907	301	[a]6,022,851
Total for preceding year	.....	583,268	1,263,147	3,157,507	1,060,039	6,251	84	6,070,296
Increase (+) or decrease (−) in year	.....	−85,625	+10,546	+10,753	+16,008	+656	+217	−47,445

[a] This total does not include the children in the poor-law schools, which, since 1904, have been inspected by the board of education. For the current year they enrolled 13,436 pupils.

TABLE 3.—*Summary of ordinary public elementary schools (departments, teachers, scholars, fees).*

	1905–6.	1904–5.	1903–4.
Number of departments	31,992	31,930	31,833
Number of teachers on staff of schools on last day of school year:			
Certificated teachers—			
Trained	44,550	42,894	41,451
Not trained	39,724	35,843	33,360
Total	84,274	78,737	74,811
"Uncertificated" teachers	40,749	42,346	40,769
Other teachers	49,056	43,989	45,345
Total	174,079	165,072	160,925
Scholars:			
Number of scholars on the registers on last day of school year—			
Boys	3,021,975	3,048,793	3,040,097
Girls	2,972,515	2,995,715	2,991,010
Total	5,994,490	6,044,508	6,031,107
Number of partial exemption scholars who attended at any time during the year	82.328	80,368	78,876
Average number of scholars on the registers during the year	6,031,806	6,045,450	6,003,245
Average number of scholars in attendance during the year	5,303,229	5,249,546	5,144,702
Fees:			
Number of departments in which fees were charged for scholars of 3 and under 15 years of age [a]	969	1,471	2,349
Number of scholars of 3 and under 15 years of age who paid fees [a]	186,038	268,823	412,471

[a] For 1903–4 the number of departments in which fees, etc., were charged includes a certain number of departments in which fees were charged for scholars over 15, but not for scholars under 15, and for the same year the number of scholars given in the table includes some scholars over 15.

The development of the ordinary public elementary schools (formerly classified as board and voluntary, now council or provided and nonprovided) is indicated by the following comparative statistics, which show the increase of the school provision and enrollment from 1871–2, the year that the education act of 1870 went into operation, to 1902, when the new administrative system was inaugurated (education act of 1902); also development from the latter year to 1906.

Ordinary public elementary schools.

Year.	Board, or council, schools.				Voluntary, or nonprovided, schools.			
	Number.	Accommodation.	Average attendance.		Number.	Accommodation.	Average attendance.	
			Number.	Per cent of total.			Number.	Per cent of total.
1871–72	82	17,156	8,726	0.66	9,972	2,278,738	1,327,432	99.34
1901–2	5,878	2,957,966	2,344,020	47.94	14,275	3,723,329	2,546,217	52.06
1906	6,980	3,520,093	3,189,399	52.88	13,549	3,509,814	2,842,407	47.12

EXPENDITURE.

The current expenditures for the elementary schools (ordinary and higher) amounted to $80,261,557 (£16,514,724). As will be seen by reference to Table 5, this sum is by far the larger proportion (viz, 81 per cent) of the total current expenditure for elementary education, which was $99,163,126. This latter sum was derived as follows: From Government grants, 53.8 per cent; from rates (local taxes), 45.2 per cent; the small balance (1 per cent) from other local sources specified in Table 4.

TABLE 4.—*Receipts of local education authorities on account of schools classified as elementary.*

Source of receipts.	Amount, 1905–6.
Loans raised	£2,134,370
Other receipts [a]	6,170
Total	2,140,540
Equivalent in United States currency	$10,403,024
Parliamentary grants:	
Grants under the agricultural rates act, 1896, etc.	£115,189
Grants other than for industrial and special schools	10,602,994
Grants for industrial and special schools	62,059
Endowments	17,028
School fees (less amounts paid to managers of voluntary schools)	67,568
Sale of books, etc., to children	13,143
Receipts in respect of industrial and special schools:	
Contributions from local education authorities and boards of guardians	29,618
Contributions from parents and other receipts (excluding grants)	17,171
Other receipts from local authorities	25,181
Other receipts (other than from local rates):	
From sale of articles made in school	40,289
From use of rooms	50,837
From teachers for rent of houses	8,866
Miscellaneous	124,040
Total receipts (other than from local rates)	11,173,983
Equivalent in United States currency	$54,305,557
Excess of payments over receipts, being equal to the net amount of payments met or to be met by rates	£9,229,952
Equivalent in United States currency	$44,857,567
Total	£20,403,935
Equivalent in United States currency	$99,163,124

[a] Other receipts to loan account comprise transfers from current account, receipts from sale of land, etc.

TABLE 5.—*Expenditures for schools classified as elementary.*

Payments.	Amount, 1905–6.
Purchase, etc., of land, buildings, and furniture	£2,028,532
Other payments [a]	96,941
Total	2,125,473
Equivalent in United States currency	$10,229,799
In respect of ordinary public elementary schools (excluding loan charges):	
Capital expenditure (including repairs to furniture)	£366,438
Salaries of teachers	13,097,919
Other expenses	2,975,620
Total	16,439,977
Equivalent in United States currency	$79,898,288
In respect of higher elementary schools (excluding loan charges):	
Capital expenditure (including repairs to furniture)	£1,111
Salaries of teachers	58,505
Other expenses	15,131
Total	74,747
Equivalent in United States currency	$363,269
In respect of industrial and special schools (excluding loan charges):	
Schools under the management of the council	£240,322
Contributions to other schools, and other expenses	176,891
Total	417,213
Equivalent in United States currency	$2,027,655
Administration (excluding loan charges):	
In respect of school attendance	£295,378
In respect of administration generally	767,445
Total	1,062,823
Equivalent in United States currency	$5,165,320
Loan charges (principal and interest)	£2,352,697
Other payments (excluding proportion of fees paid to managers of voluntary schools)	56,478
Total payments	20,403,935
Equivalent in United States currency	$99,163,126

[a] Other payments out of loan account comprise transfers to current account, repayments of unexpended balances of loans, etc.

TRAINING COLLEGES FOR TEACHERS.

The training colleges for teachers are institutions under private management, but aided by Government grants upon specified conditions and subject to Government inspection. They are of two classes, residential and day. The former, which number 51 (16 for men, 35 for women), are all denominational excepting 9, of which 2 are for men and 7 for women. The hostels included in the table are provided or supervised by the authorities in charge of the colleges.

The following tables (6–8) summarize the principal statistics relative to the student body in these institutions for the year specified.

The scheme of study leading to the examination for the Government certificate may be inferred from the classification of students, and the results of the examination as set forth in Tables 8 and 8A.

TABLE 6.—*Number, accommodation, provision, and religious connections of training colleges for teachers at the beginning of the session.*

	1905–6.			1904–5.			1903–4.		
	Number.	Accommodation.		Number.	Accommodation.		Number.	Accommodation.	
		Resident.	Day.		Resident.	Day.		Resident.	Day.
Number and accommodation of colleges:									
Residential colleges—									
For men only	16	1,683	51	16	1,638	35	16	1,620	3
For women only	35	3,487	447	32	3,354	355	30	3,044	272
Day training colleges—									
For men only	4	.....	264	4	.....	254	4	.....	224
For women only	2	.....	303	3	.....	335	2	.....	245
For men and women	15	.....	2,752	13	.....	1,985	13	.....	1,648
Total	72	5,170	3,817	68	4,992	2,964	65	4,664	2,392
Provision of colleges:									
Colleges provided by a local education authority	4	104	580	3	104	339	1	.....	169
Colleges for which universities and university colleges are responsible—									
Colleges for which universities are responsible	8	.....	1,377	7	.....	848	7	.....	775
Colleges for which university colleges are responsible	8	.....	1,118	9	.....	1,165	9	.....	978
Other colleges	52	5,066	742	49	4,888	612	48	4,664	470
Religious connections of residential colleges:									
Denominational colleges—									
Colleges for men—									
Church of England	12	1,224	50	12	1,215	32	12	1,200	3
Wesleyan	1	140	.....	1	140	2	1	140	.....
Roman Catholic	1	106	.....	1	70	.....	1	70	.....
Total	14	1,470	50	14	1,425	34	14	1,410	3
Colleges for women—									
Church of England	21	2,106	375	20	2,054	297	20	1,959	232
Wesleyan	1	129	12	1	129	12	1	111	6
Roman Catholic	6	437	.....	4	358	.....	3	265	.....
Total	28	2,672	387	25	2,541	309	24	2,335	238
Undenominational colleges—									
Colleges for men	2	213	1	2	213	1	2	210	.....
Colleges for women	7	815	60	7	813	46	6	709	34
Total	9	1,028	61	9	1,026	47	8	919	34

TABLE 7.—*Number of recognized students and private students in training colleges for teachers and hostels at the beginning of the session, classified according to residence or attendance.*

	1905–6.		1904–5.		1903–4.	
	Men.	Women.	Men.	Women.	Men.	Women.
Number of recognized students actually resident or in attendance:						
Resident students in residential colleges	1,594	3,382	1,565	3,218	1,540	2,940
Day students resident in hostels—						
In attendance at residential colleges	.....	57	.....	55	.....	24
In attendance at day training colleges	98	229	78	164	58	119
Total	98	286	78	219	58	143
Day students not resident in hostels—						
In attendance at residential colleges	56	243	34	236	2	197
In attendance at day training colleges	1,074	1,399	860	1,190	786	985
Total	1,130	1,642	894	1,426	788	1,182
Grand total	2,822	5,310	2,537	4,863	2,386	4,265
Number of recognized students admitted to a third year of training elsewhere than at the college:						
In England	.....	.....	.....	.....	1	.....
In France	3	33	7	21	5	29
In Germany	4	.....	2	.....	5	.....
Total	7	33	9	21	11	29
Number of private students (i. e., students other than recognized students):						
Resident private students in residential colleges	7	16	12	15	11	9
Day private students resident in hostels	.....	.....	.....	.....	.....	.....
Day private students not resident in hostels—						
In attendance at residential colleges	.....	.....	2	.....	1	.....
In attendance at day training colleges	6	5	8	81	4	4
Total	6	5	10	81	5	4
Grand total	13	21	22	96	16	13

TABLE 8.—*Results of the examination held by the board in 1906.*

	Two-year students.		One-year students.		Certificated students.		Total.	
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.
Number of students presented in compulsory subjects:								
Students presented for the examination as a whole—								
Number presented	749	1,938	1	6	29	33	779	1,977
Number who passed	743	1,936	1	6	29	30	773	1,972
Number who failed	6	2	.....	.....	.....	3	6	5
Students presented for particular subjects only—								
Number presented for teaching	997	2,224	1	5	4	.....	1,002	2,229
Number presented for music	1,033	2,262	1	5	4	.....	1,038	2,267
Distinctions obtained in compulsory subjects:								
Number of students who obtained distinction—								
In one subject only	263	612	.....	3	5	5	268	620
In two subjects	81	237	.....	.....	2	.....	83	237
In three subjects	18	86	.....	.....	.....	.....	18	86
In four subjects	5	20	.....	.....	.....	.....	5	20
In five subjects	.....	3	.....	.....	.....	.....	.....	3
Total	367	958	.....	3	7	5	374	966
Number of distinctions obtained in each subject—								
The principles and practice of teaching	86	307	.....	2	3	1	89	310
English language, literature, and composition	49	275	.....	.....	2	1	51	276
Arithmetic and elementary mathematics	137	330	.....	1	3	.....	140	331
History and geography	54	138	.....	.....	1	2	55	140
Music (including theory of music and singing)	173	389	.....	.....	.....	1	173	390
Total	499	1,439	.....	3	9	5	508	1,447
Results of examination in optional subjects:								
Results classified according to the number of subjects offered—								
Number of students who took one subject	256	620	.....	.....	3	3	259	623
Number of students who took two subjects	56	39	.....	.....	.....	.....	56	39
Total	312	659	.....	.....	3	3	315	662
Number of students who passed in at least one subject	118	369	.....	.....	2	1	120	370
Number who obtained distinction in at least one subject	69	167	.....	.....	.....	.....	69	167
Total number of distinctions obtained	70	173	.....	.....	.....	.....	70	173

TABLE 8A.—*Detailed statement of the results of the examination in optional subjects held by the board in 1906.*

Optional subjects.	Number of candidates who took the subject.						Number who failed to pass in the subject.		Number who passed but without distinction.		Number who passed with distinction.	
	Two-year students.		Certificated students.		Total.							
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.
Latin	24	9	.....	.....	24	9	22	8	1	.....	1	1
Greek	2	.....	.....	.....	2	.....	1	.....	1	.....	.....	.....
French	119	374	.....	2	119	376	70	112	48	202	1	62
German	1	2	.....	.....	1	2	.....	2	1	.....	.....	.....
Welsh	.....	15	.....	1	.....	16	.....	4	.....	5	.....	7
Italian	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Spanish	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hebrew	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Theoretical mechanics	7	.....	.....	.....	7	.....	4	.....	3	.....	.....	.....
Light	.....	11	.....	.....	.....	11	.....	.....	.....	10	.....	1
Heat	15	11	1	.....	16	11	.....	.....	7	7	9	4
Inorganic chemistry (theoretical and practical)	39	12	.....	.....	39	12	24	4	15	7	.....	1
Human physiology	.....	10	.....	.....	.....	10	.....	.....	.....	8	.....	2
Botany	17	136	.....	.....	17	136	4	5	12	104	1	27
Physiography	15	9	2	.....	17	9	6	.....	10	3	1	6
Hygiene	.....	30	.....	.....	.....	30	.....	.....	.....	6	.....	24
Rural subjects	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mathematics	110	62	.....	.....	110	62	38	18	17	12	55	32
Advanced drawing	19	17	.....	.....	19	17	12	5	5	6	2	6
Total	368	698	3	3	371	701	181	158	120	370	70	173

EXPENDITURE FOR TEACHERS' TRAINING COLLEGES.

The total current expenditure for the training colleges and hostels comprised in the foregoing tables for the year ending June 31, 1906, was £422,632 ($2,053,991); of this amount, £322,803 ($1,568,822), or 76.38 per cent, was derived from the Government grant.

ELEMENTARY SCHOOLS IN CERTAIN MUNICIPALITIES.

TABLE 9.—*Statistics of public elementary schools in the municipalities (county boroughs) of England having more than 300,000 inhabitants, 1905–6.*

Municipalities.	Estimated population, 1906.	Council schools.			Voluntary schools.		
		Number.	Accommodation.	Average attendance.	Number.	Accommodation.	Average attendance.
London[a]	7,113,561	526	578,982	491,706	403	221,035	166,416
Birmingham	548,022	64	64,350	57,093	50	31,236	25,304
Bristol	363,223	46	40,972	35,492	50	25,546	20,785
Leeds	463,495	67	69,993	50,960	48	29,758	20,844
Liverpool	739,180	50	57,484	48,422	111	84,440	66,607
Manchester	637,126	79	53,677	50,995	84	57,851	44,687
Sheffield	447,951	55	52,453	46,123	45	26,316	20,592
West Ham	301,617	45	59,302	46,806	13	8,646	6,812

[a] London is an independent administrative county whose school system is organized under the law of 1903.

TABLE 9.—*Statistics of public elementary schools in the municipalities (county boroughs) of England having more than 300,000 inhabitants, 1905–6*—Continued.

Municipalities.	Total.			Staff of schools on last day of school year.				
						Other teachers.		
	Number.	Accommodation.	Average attendance.	Certificated teachers.	Uncertificated teachers.	Supplementary and provisional assistant teachers.	Pupil teachers and probationers.	Total.
London [a]	929	800,017	658,122	14,079	1,398	908	1,869	18,254
Birmingham	114	95,586	82,397	1,451	450	131	421	2,453
Bristol	96	66,518	56,277	944	409	116	243	1,712
Leeds	115	99,751	71,804	1,314	403	237	308	2,262
Liverpool	161	141,924	115,029	2,152	804	338	684	3,978
Manchester	163	111,528	95,682	1,625	890	123	421	3,059
Sheffield	100	78,769	66,715	1,108	347	82	287	1,824
West Ham	58	67,948	53,618	1,166	190	60	125	1,541

[a] London is an independent administrative county whose school system is organized under the law of 1903.

TABLE 10.—*Expenditure for public elementary schools, 1905–6.*

Municipalities.	Amount.	Equivalent in United States currency.
London	£3,995,264	$19,416,983
Birmingham	344,581	1,684,663
Bristol	206,923	1,005,645
Leeds	298,432	1,450,379
Liverpool	522,304	2,538,397
Manchester	414,849	2,016,186
Sheffield	231,732	1,126,217
West Ham	262,819	1,177,300

HIGHER EDUCATION.

The term "higher education," as used in the education act of 1902, comprises a variety of institutions, namely, secondary schools distinctively recognized as such, science and art schools receiving Government grants, and evening schools, covering collectively a wider range than the secondary schools of the United States.

The board of education had been previously charged with the general administration of the Government grants for this class of institutions, and with authority to inspect any school supplying secondary education which should apply for inspection.[a]

By the law of 1902, local education authorities were empowered to supply or aid the supply of education other than elementary, and to promote the general coordination of all forms of education, and for that purpose to apply all or so much as they deem necessary of the residue of the liquor duties (section 1, local taxation, customs and excise act, 1890), and to carry forward for the like purpose any balance thereof which may remain unexpended, and to spend such further sums as they think fit.

[a] Board of education act, 1899 (62 and 63 Vict., C. 33, sec. 3).

The amount raised by the council of a county for the purpose here specified was the amount which would be produced by a rate of 2d. in the pound, or such higher rate as the county council with the consent of the local government board might fix.

The central authority and the principal local authorities have been actively engaged during the year in developing this branch of the work.[a] The efforts of the former have been confined to formulating regulations defining the classes of institutions that will be recognized as higher, and determining the conditions upon which they may have the benefits of Government inspection or Government grants. The latter include grants formerly made through the science and art department and additional grants made for higher education.

The secondary schools acknowledged by and receiving grants from the board of education are under various forms of management. They may be maintained by the local authority and governed by a committee of the council; or they may be governed by schemes under charitable trusts or the endowed schools acts; or (in Welsh and Monmouthshire) they may be governed by schemes under the Welsh intermediate education act of 1899; or they may have governing bodies not constituted under any statutory scheme.

In 1906 there were in England and Wales 689 recognized secondary schools, with a total of 115,688 pupils, of whom 76,771 were taking an approved curriculum, while 34,135 were in forms below, and 4,782 in forms above those taking an approved course. The number on account of whom grants were paid was 66,014. Of the total number of pupils, 65,994 were boys and 49,694 were girls.

The following statement shows the number of institutions of various sorts for promoting scientific, art, and technical instruction comprised under the head of higher education, together with the number of their teachers and the number of pupils in respect of whom grants were paid in 1905–6:

Institutions.	Number.	Teachers.	Grant-earning pupils.	Amount of grant.	Equivalent in United States currency.
Technical institutions	29	498	2,082	£12,104	$58,825
Schools of art	224	1,133	.....	56,889	276,480
Day technical classes	66	597	4,862	10,761	52,298
Day art classes	78	146	1,416	1,307	6,352
Evening schools	5,728	30,894	525,486	347,405	1,688,388

EXPENDITURE ON ACCOUNT OF EDUCATION OTHER THAN ELEMENTARY.

From the return (325) issued by the board of education showing the application by local authorities of funds for higher education in England and Wales during the official year 1905–6, it appears that the

[a] For a detailed account of initiatory measures in this direction see Report of the Commissioner for 1904, Vol. I, ch. 13.

total expenditure on account of education other than elementary during the year was £3,355,434 ($16,777,170). Of this amount £706,149 ($3,530,715) was spent on secondary schools and £234,182 ($1,170,910) on pupil-teacher centers. On behalf of evening schools and institutions for higher and technical education, £1,200,789 ($6,003,945) was expended, and in day schools of similar scope £258,517 ($1,292,585). Exhibitions and bursaries at secondary schools, pupil-teacher centers, and evening and day technical institutions accounted for £376,762 ($1,683,810). The training of teachers cost £71,910 ($359,550), the salaries of officers other than teachers £120,531 ($602,655), and £150,660 ($753,300) was paid on account of loans. The part of the total amount which was expended in Wales reached £214,185 ($1,070,925), more than half of which was devoted to secondary schools.

SYSTEM OF PUBLIC EDUCATION IN SCOTLAND.

BRIEF CONSPECTUS OF THE SYSTEM.

The system of public education in Scotland was organized by a law of 1872 on a basis similar to that of the English system as regards support from the public treasury and the Government inspection of schools. Scotland had, however, a system of public schools dating from a law of 1696, which required that a school be established in every parish. The country was thus prepared for a system of universal school boards as provided for by the law of 1872.[a] The law differed also from the English law of 1870 in that, following the traditions of the old parish system, it made provisions for both elementary and secondary schools. The latter did not share in the treasury grant, but by subsequent laws were allowed support from local taxes. Whereas compulsion has been gradually introduced into the English system, the Scotch law made education compulsory for all children between the ages of 5 and 13 (raised to 14 in 1883), or until a certificate of exemption should be secured. The standard or grade for exemption was made the fifth (law of 1878); the minimum age for exemption is 12 (law of July, 1899).

A law of 1901 strengthened the compulsory measures, without, however, changing the age limits.

Religious instruction in the schools of Scotland was left to local authorities, with the simple restriction of a conscience clause making the attendance of children at the religious exercises optional with the parents. A grant in lieu of fees (law of 1889) has had the effect of making the schools practically free schools.

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[a] For detailed account of the system of education in Scotland, see Report of the Commissioner of Education for 1889–90, Vol. I, Part I, chs. 4 and 5.

The central authority is the Committee of Council on Education in Scotland (Scotch education department). This body administers the Parliamentary grant for education, determines the conditions on which schools may participate in the grant, and maintains an annual inspection of the schools.

The local authorities are school boards elected in every parish and every burgh. These boards may claim and levy rates (local taxes) for the support of schools and borrow money upon the security of the rates to defray the costs of building and furnishing schoolhouses. They receive and disburse the government grant for public elementary schools. In the case of private schools the grant is paid over to the managers of the same.

In the light of experience the chief defect in the Scotch system is seen to be the number of small school districts having independent control of their school affairs, and the consequent varying and uncertain tenures for teachers. Complaint is also made of the freedom allowed the civil local authorities (county and town councils) in respect to the disposition of the funds for promoting technical education, allowed under the customs and excise act of 1890 from the surplus of the liquor duties.

RECENT EFFORTS FOR DEVELOPING AND IMPROVING THE SYSTEM.

The Scotch education bill introduced into the House of Commons in 1905 was designed to correct these evils, but it failed of passage. The bill introduced during the present year avoided administrative problems and dealt only with certain remedial measures, namely, the equalization of expenditure, provision for the medical inspection of schools[a] and for aid to ill-fed and destitute children, and expansion of the teachers' pension system; but although these are provisions urgently needed the bill was not carried.

PROGRESSIVE POLICY OF THE DEPARTMENT.

While administrative reforms have been delayed, the official regulations of the Scotch education department have fostered a progressive policy in the general scheme of education. Following the historic tendencies of the country, recent measures have been taken to maintain definite standards for elementary schools and to preserve continuity between their work and that of higher-grade schools. In 1899 a merit certificate was instituted, which entitled the holder to exemption from further attendance upon school. It was soon discovered that children were pushed to pass the examination at the earliest age allowed (12 years), and consequently the regulations of 1903 arranged for a supplementary course, which candidates for the merit certificate

[a] As an evidence of interest in the health of school children see the pamphlet on the cleaning and disinfecting of schools issued by the Scotch education department, 1907.

were compelled to pursue at least one year. This course must provide for the instruction of the pupils in the following subjects: English (including history and geography), mathematics (including arithmetic), at least one language other than English, and science and drawing, according to a scheme approved for the certificate examination in these subjects.

In order that the merit certificate should continue as before to mark the successful completion of the elementary school proper, a standard of proficiency is indicated in the code (art. 29) to be obtained by candidates for the certificate. It was also decided that the question of the pupil's fitness, according to this standard, to enter upon a higher course of studies should no longer be determined by the results of a single examination, but by the whole character of his work during the preceding school course, and particularly during the six months preceding his possible transference, during which the head master of the school would be charged with the special responsibility of observing, testing, and reporting to the government inspector the attainments of the respective candidates.

These changes it is believed will effect an improvement in school organization by the transfer, at an earlier age, to secondary or higher-grade schools, of those pupils who desire and are fit to enter upon the work of such schools, while those who remain in the elementary schools may receive, in the supplementary course, further instruction in elementary subjects in such form as to have a greater practical value for the work of life.

The supplementary course relieves the higher-grade departments from the work thus provided for, and leaves the former free to carry on the general education of pupils who may be expected to remain at school up to the age of 15 or 16 years.

As evidence of the excellent results of these measures, the official report calls attention to the fact that toward the close of the summer session of 1906, 48,841 candidates were approved by the inspectors for enrollment in supplementary courses or higher-grade departments, and 9,707 were awarded merit certificates.

The new regulations have also caused a decided increase in higher-grade schools and departments. In 1903 these numbered 36, with an enrollment of 5,157 pupils. The next year the schools had increased to 74 and the pupils to 10,453, and in 1906 the numbers were, respectively, 137 schools with 19,319 pupils.

These higher-grade schools are carefully distinguished from what are termed in Scotland "higher-class schools," corresponding to the classical secondary schools of England. These distinctively secondary schools are being gradually drawn into relations with the education department, under a separate body of regulations and a separate system of local control (burgh and county committees).

NEW TERMS OF CLASSIFICATION.

The purpose of the department to keep educational aims in view is indicated by a change in the terms of classification announced in the following introductory note to the code of 1907:

For the purpose of these and other regulations of the department, it will be found convenient to use a classification of schools based solely on distinction of curriculum.

Of the designations at present in common use, the term "elementary," as defined in the English education act of 1870, is not strictly applicable to any class of school in Scotland. The term "higher grade" connotes a school receiving grants under the code, and is therefore restricted in its application. The term "higher class" comes originally from the education act of 1872, and is mainly of historical interest, having no necessary relation to the character of the work done in the schools so designated.

The nomenclature which it is now proposed to use is the following:

Primary school.—A school, or a department of a school, giving an education based entirely upon English to pupils who are, as a rule, below the age of 14. A primary school may contain individual pupils or small sections of scholars who are being instructed on the lines of an intermediate or even, in exceptional circumstances, of a secondary school.

Intermediate school.—A school providing at least a three years' course of secondary education (including, as a rule, instruction in a language or languages other than English) to pupils who, on entering, have reached the stage of attainment in elementary subjects indicated in article 29 I of the code ("qualifying examination").

Secondary school.—A school providing at least a five years' course of secondary education beyond the qualifying examination stage.

An intermediate school corresponds generally to a higher-grade school, but there are some higher-class schools which may fall into this category.

A secondary school corresponds generally to a higher-class school, but there are some higher-grade schools which have developed, or in suitable circumstances may be expected to develop, a complete secondary school course.

An intermediate school should retain its pupils until at least the age of 15 or 16, and the normal attainments of the pupils at that age should be those indicated by the intermediate certificate.

A secondary school should retain its pupils till at least the age of 17 or 18, and no pupil who has not qualified for the award of some form of leaving certificate or for one of the alternative technical or commercial certificates can be held to have completed the course satisfactorily.

Though the education of the intermediate school is of the nature of secondary, as distinguished from primary education, the choice of subjects and the relative importance to be given to them at various stages of the curriculum may properly vary within certain limits, according as the school is one providing a three years' course or one providing a five years' course. The curriculum of each type of school should be so arranged as to present, at the age at which the pupils normally leave, a certain unity and completeness.

On the other hand, it is important that as between the secondary school and the various intermediate schools of the same district there should be no unnecessary divergence of curriculum in the earlier stages, so that transferrence from the one to the other may not be impeded.

MEMORANDA RELATIVE TO DIFFERENT BRANCHES OF STUDY.

The regard for distinctively educational purposes is indicated also by the recent publication of a series of memoranda treating of the different branches of study.

The scope and spirit of these treatises are set forth in the following prefatory note, introducing the first number of the series:

The present is the first of a series of memoranda which it is intended to issue at short intervals. As is well known, it has for years past been the policy of the department (as expressed in the code) to refrain from prescribing in detail the courses of instruction in the various school subjects. Teachers and managers have been left free to formulate their own proposals for consideration and approval. There is no thought of departing from this policy which, though not without its disadvantages in certain cases, has yet given a stimulus to independent deliberation upon questions of curriculum, and thereby a directness of purpose and aim to individual work, the effects of which are becoming increasingly visible in our schools. The task of laying down a suitable course in any given subject is, however, by no means an easy one, and the department has been repeatedly appealed to for guidance. It is in response to these appeals that the preparation of the memoranda has been undertaken.

It follows from what has been said that, as a rule, no attempt will be made to formulate a definite scheme of instruction. A definite scheme must be relative to the particular school to which it is to apply, and must take account of many circumstances, such as the size of the school concerned, the extent to which the classes are subdivided, and, above all, the contribution which the home may be depended upon to make toward the education of the children—considerations which are foreign to a general discussion. But an endeavor will be made to present clearly the end and aim of instruction in each separate branch, and the inner articulation and development of its subject-matter, as well as to indicate certain leading principles which should be kept in view in the preparation of detailed syllabuses. Furthermore, the memoranda are not put forward as final or authoritative documents. The views expressed embody, it is believed, the ideals and aspirations that animate the best schools; and few, if any, specific recommendations are made which are not supported by the actual experience of teachers of repute. But criticisms and suggestions will be welcomed and will be carefully weighed, with a view to issuing revised editions, from time to time, as experience may prompt. All that is expected, therefore, is that the memoranda will receive the thoughtful consideration of teachers and managers in the framing of their syllabuses, in order that no radical departure may be made from the general principles advocated without a deliberate judgment as to the reasons which justify such a departure.[a]

CURRENT OPERATIONS.

The following particulars relating to the elementary and higher grade schools are compiled from the latest official report:[b]

SUMMARY OF ENROLLMENT, AVERAGE ATTENDANCE, AND PER CAPITA EXPENDITURE.

The total number of pupils enrolled at the end of the school year (August 31, 1906) in the elementary day schools and the higher grade schools was 806,737, equivalent to 17.7 per cent of the population. Of this number, 158,903 were below 7 years of age, and 647,834 were above 7.

The average attendance, 706,062, was 87.52 per cent of the enrollment.

By reference to Table 12 it will be seen that during the period 1900 to 1906 the number of higher grade schools increased from 31 to 137, or nearly fivefold, and the average enrollment from 2,832 pupils to 19,319, the latter number being nearly seven times the former.

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[a] Memoranda on the teaching of arithmetic, language, geography, and drawing have already been issued. These are included in the appendix to the annual report of the Scotch education department, 1906–7, and are also published in separate pamphlets.

[b] Report of the committee of council on education in Scotland, 1906–7.

The total expenditure for elementary education was $10,956,892 (Table 14); estimated on the total enrollment this gives a per capita expenditure of $13.58, and, estimated on the total population, a per capita of $2.32.

TABLE 11.—*Total number of day schools (elementary and higher grade) on the annual grant list August 31, 1906, and the number of scholars on the registers in those schools.*

Denominations.	Number of schools.	Total number of scholars.
Public schools	2,903	697,182
Schools connected with Church of Scotland	18	2,900
United Free Church	6	1,925
Episcopal Church	62	11,919
Roman Catholic Church	208	83,993
Undenominational and other schools	65	8,818
Total	3,262	806,737
Total for previous year, 1904–5	3,244	804,162

TABLE 12.—*Comparative statistics of elementary and higher grade schools in Scotland.*

	Years.					
	1872.	1880.	1890.	1900.	1905.	1906.
Estimated population	3,395,802	3,705,314	4,109,275	4,324,944	4,672,145	4,723,539
Number of schools:						
Day schools	1,979	3,064	3,076	3,104	3,123	3,125
Higher grade schools	----------	----------	----------	31	121	137
Accommodation:						
Day schools	281,688	602,054	714,865	893,842	963,151	978,109
Higher grade schools	----------	----------	----------	9,292	28,267	31,742
Average number on the registers during year:						
Day schools	----------	534,428	664,466	753,287	787,492	788,850
Higher grade schools	----------	----------	----------	3,271	16,291	19,319
Average attendance:						
Day schools	213,549	404,618	512,690	626,089	681,873	688,912
Higher grade schools	----------	----------	----------	2,949	14,508	17,150
Number of—						
Certificated teachers	2,566	5,330	7,745	10,845	13,604	14,186
Assistant teachers	----------	444	1,320	2,418	2,718	2,794
Pupil teachers	3,642	4,582	3,883	3,926	4,191	4,323
Students in training colleges	729	892	861	1,250	1,395	1,534
Students at other training centers	----------	----------	----------	110	333	661

TABLE 13.—*Progress of higher grade schools since their establishment.*

Year.	Number of schools.	Accommodation.	Average number of scholars on registers.	Average attendance.			
				First year's course.	Second year's course.	Beyond second year.	Total.
1900	27	7,740	2,832	1,606	604	351	2,561
1901	34	9,721	3,518	1,712	1,053	505	3,270
1902	35	10,103	4,327	2,209	1,006	606	3,821
1903	36	10,299	5,157	2,663	1,223	662	4,548
1904	74	18,965	10,453	6,650	2,137	1,320	10,107
1905	121	28,267	16,291	7,937	4,340	2,231	14,508
1906	137	31,742	19,319	8,664	5,086	3,400	17,150

TABLE 14.—*Income for grant-aided schools (elementary and higher grade), 1906–7.*

Sources.	Amount.	Equivalent in United States currency.
Endowment	£14,766	$71,763
School-board rates	675,054	3,280,762
Voluntary contributions	40,984	199,182
School pence (fees)	21,476	104,373
Government grants	1,434,580	6,972,059
Other sources	67,478	327,943
Total	2,254,338	10,956,083

The total expenditure for the schools included in the above table amounted to £2,254,484 (equivalent in United States currency, $10,956,892).

COURSE OF STUDY.

The course of study for the elementary schools comprises, besides the three main subjects, reading, writing, and arithmetic, the following branches described in the code (official regulations) as auxiliary: Physical exercises, singing, drawing, nature knowledge, geography, history, and, for girls, sewing.

With respect to these auxiliary branches the report says:

> Certain of these subjects, e. g., nature knowledge, geography, history, may be, and ought to be, made to subserve in large degree the purposes of the main instruction in English and arithmetic, and instruction in the former class of subjects need in no way interfere with the attainment of due proficiency in the latter. Drawing, if properly taught, is a valuable instrument for nature study, and may indeed be reckoned as part of the same subject. Other subjects, e. g., physical exercises and singing, while less intimately allied with the main instruction, are essential concomitants of it, and sewing is a subject in which some degree of expertness must be acquired during school life, if it is to be acquired at all.
>
> For these reasons we regard the foregoing subjects, each in due measure, and with due regard to the age of the pupil, as integral parts of the curriculum in the elementary stages of every school, and we should regret if, whether from the lack of duly qualified teachers or other causes, any part of this comprehensive discipline should have to be omitted.

In view of the great interest now manifested in the teaching of agriculture, the committee add:

> While we do not think it feasible or desirable to make practical instruction in agriculture part of the curriculum of rural schools in general, we think it possible to give to the studies of the more advanced pupils in many of these schools such a direction as shall foster their interest in rural life and give them some insight into the scientific principles which underlie the practice of agriculture. Such a possibility has been kept carefully in view in framing the new regulations by which the training of future teachers will be governed.

The statistics show that drawing was taught in 2,936 elementary schools and in all the higher grade schools, being obligatory in the latter. Singing was taught in 3,228 schools, and in all but 57 of these by note. The other auxiliary subjects (nature knowledge, geography, history, and needlework) are practically universal in all schools which possess the complete organization of junior and senior divisions.

It is noted also that savings banks have been established in 228 schools, the amount standing to the credit of the depositors (35,712 in number) at the end of the school year being £9,798 ($48,990), and that there are school libraries in 1,583 schools, with an aggregate of 333,000 books.

TEACHERS—NUMBER AND QUALIFICATIONS.

By reference to Table 12 it will be seen that the total number of teachers reported in 1906 was 21,303, of which number 5,719 were men and 15,584 were women. Of the former, 4,737, or 81.63 per cent, had been students in training colleges, while of the women 9,347, or 58.04 per cent, had received similar training.

Commenting upon these figures the report says:

> It must not be forgotten, however, that of the minority, especially in the case of the male teachers, many have obtained, otherwise than in the training colleges, a training of a very valuable sort. Many of both sexes, who entered the profession as acting teachers, had acquired a knowledge of the duties of their profession by serving as pupil-teachers, and afterwards as assistants, under teachers of large experience and skill. Of the whole number of teachers, again, we find that 1,687 are graduates (1,440 male and 247 female), while many have been partially educated at the universities, and have also acquired experience by service in schools.

PROVISIONS FOR TRAINING TEACHERS.

Heretofore students in the training colleges have been drawn chiefly from the ranks of the pupil-teachers. The report calls attention to the fact that under the provisions of the regulations for 1906—

> Eighty-eight centers for the training of "junior students" have been recognized, where those who propose to enter into full training may undergo an approved preliminary course of instruction both in the subjects of general education and in the art of teaching, and it is anticipated that the training centers will eventually be recruited mainly from this source. The normal junior student curriculum has been so framed as to include the main branches in which every certificated teacher ought to attain to a certain degree of proficiency, while at the same time care has been taken not to overcrowd it unduly. As a result the student of the future ought, on reaching the training center, to be in a position to devote more attention than has hitherto been possible to his strictly professional training, and also to pursue in some detail, whether at the university or elsewhere, any special line of study for which he may have developed an aptitude.

With respect to the attendance of teachers in training at university classes the report says:

> The plan of adding some attendance at university classes to the ordinary curriculum of the training colleges was first proposed by the code of 1873, under which the fees of students, who, after giving proof of their qualifications, attended university classes, were admitted as part of the legitimate expenditure of training colleges. Advantage has been taken of this opportunity to a large extent, while in the case of King's students attendance at university classes has hitherto been universal. In this way not a few of the future Scotch teachers are acquiring some higher culture in a sphere larger than that of any institution devoted to purely professional training, and we believe that this will greatly help in maintaining the high standard which has always been a traditional characteristic of Scottish education.

TABLE 15.—*Number of students actually in training, and the number of these who were attending university classes during 1906–7.*

	Total number of students in training.			Number attending the university.		
	Males.	Females.	Total.	Males.	Females.	Total.
TRAINING COLLEGES.						
Aberdeen (Church of Scotland)	19	111	130	15	4	19
Aberdeen (United Free Church)	38	102	140	22	4	26
Edinburgh (Church of Scotland)	78	155	233	52	56	108
Edinburgh (United Free Church)	81	152	233	47	36	83
Edinburgh (Episcopal Church)	.....	72	72	.....	6	6
Glasgow (Church of Scotland)	74	232	306	47	13	60
Glasgow (United Free Church)	85	195	280	81	19	100
Glasgow (Roman Catholic)	.....	140	140	.....	7	7
Total for training colleges	375	1,159	1,534	264	145	409
TRAINING CENTERS.						
Aberdeen	36	77	113	36	77	113
Dundee	10	113	123	5	58	63
Edinburgh	22	81	103	22	81	103
Glasgow	84	207	291	84	207	291
St. Andrews	7	24	31	7	24	31
Total for training centers	159	502	661	154	447	601
Grand total	534	1,661	2,195	418	592	1,010

TEACHERS' SALARIES.

The average salary of schoolmasters (whether principals or assistants) is now £152 13s. 11d. ($742.07), whereas in 1870 it was £101 16s. 7d. ($494.84); that of schoolmistresses was then £55 14s. 2d. ($270.75), and is now £78 19s. 2d. ($383.74). Besides this, 1,598 masters and 568 mistresses are provided with residences free of rent.

SECONDARY EDUCATION.

In 1885 the Scotch education department arranged for the inspection of endowed and other secondary schools applying for the service. In 1906 the number of schools inspected was 109, of which 32 were higher-class public schools, 24 endowed schools, and 53 private schools. These schools had an enrollment in 1906–7 of 18,310 scholars, of whom 13,663 (7,690 boys, 5,973 girls) were above 12 years of age.

In 1883 the department established a leaving certificate for students who, on the completion of a course of secondary study, should pass the certificate examination; subsequently an intermediate certificate was also offered. In 1902 a new plan was adopted for the certificate examinations, whereby recognition was accorded for passes in certain well-defined groups of studies instead of in single subjects as before.

The regulations for 1905 announced that applicants for leaving certificates must have been receiving higher instruction at some recognized school for not less than four years. In the case of applicants for intermediate certificates, the corresponding period is two years. The minimum age for the certificate examination is 17 in

the former case and 15 in the latter. So far as the written examination is concerned, candidates for the leaving certificate must have passed in four subjects on the higher-grade standard, or in three subjects on the higher-grade standard and two on the lower. The regulations presuppose a certain common basis of study in all cases, but they are so graded, as regards the subjects in which a latitude of choice is allowed, that each candidate must have undergone either a specifically scientific or a specifically linguistic course of training. In connection with the linguistic course of training, some evidence of a knowledge of Latin is required. The leaving certificate thus indicates primarily ripeness for university study, English and mathematics being compulsory for both courses. Similarly, candidates for the intermediate certificate must have passed in four subjects, at least one of the subjects being on the higher-grade standard. English and mathematics are compulsory, but until 1907 a pass in higher arithmetic will be accepted in lieu of a pass in lower mathematics. In regard to the other subjects, there is complete freedom of selection. The intermediate certificate thus provides a guaranty as to the possession of the minimum of general knowledge that may reasonably be looked for in pupils who propose to enter on a specialized course. It is, therefore, naturally to be regarded as a preliminary step toward the gaining of the commercial and technical certificates instituted by the department in 1903, for which the minimum age is 16 years.

CONTINUATION CLASSES.

In addition to the organized secondary schools provision is made by continuation classes for the further instruction of pupils who have finished attendance upon day schools.

The following information respecting this division of the work is compiled from the official report already cited:

The further instruction in special subjects of pupils who had already completed their day school course, was, until 1901, conducted under two sets of departmental regulations, viz, the provisions of the Code for Evening Continuation Schools, and the Science and Art Directory.

These have been recently replaced by an uniform set of regulations embodied in the Continuation Class Code, which takes cognizance of all forms of specialized instruction, from the most elementary to that given in those specially selected central institutions which may be described as industrial universities.

The following table shows the number of approved separate centers for continuation classes and the main divisions of classes, in respect of the current session and the two preceding sessions:

Session.	Separate centers.	Divisions of classes.			
		I.	II.	III.	IV.
1904–5	761	441	644	75	116
1905–6	748	405	634	96	115
1906–7	772	390	643	98	122

Ten institutions have been exempted from the provisions of the code—under the powers conferred by article 87—and these are working under special minutes (applicable to each institution) to which the consent of the treasury has been given, viz: Aberdeen Gordon's College and Gray's School of Art, Aberdeen and North of Scotland College of Agriculture, Dundee Technical Institute, Edinburgh and East of Scotland College of Agriculture, Edinburgh Heriot-Watt College, Glasgow and West of Scotland Technical College, Glasgow Athenæum Commercial College, Glasgow School of Art, Leith Nautical College, and the West of Scotland Agricultural College. * * *

The Continuation Class Code of 1906 provided a scheme of instruction for the preparatory classes under Division I more closely related to the instruction given in supplementary courses under the day school code. But such classes are intended to serve a temporary purpose only. We look forward, however, to the time, when, as a result of a more thorough previous general education in the day school, pupils will be in a position to profit by the specialized instruction provided under the other divisions of the code without the necessity of undergoing further preparatory training.

The number of classes established for specialized instruction under Division II is slightly in advance of the number recognized last session. It is also gratifying to record that the number of classes placed under Division III is well maintained. Great interest continues to be shown in submitting schemes of work more adapted to local needs, and there is a marked tendency toward an improved correlation of work. In some cases an improvement is observable in a more satisfactory organization of classes within burghs, both as between those under the same management and those under different management. The adoption in all large centers of a coordinated system of instruction for continuation-class pupils from the time of leaving the day school is desirable in the interests alike of the students and of education.

Attendance at the auxiliary or recreative classes under Division IV shows little change from one session to another. Of such classes, those for physical training appear to be the most popular. But it is disappointing to find a disposition on the part of far too many of the students to overlook the obvious advantages of attending also classes of a strictly educational character. We trust that school managers will do all in their power to encourage such attendance.

EXPENDITURE.

Under the local taxation (customs and excise) act of 1890, and other acts providing for the application of public funds to secondary and technical education, the local authorities expended for these purposes in 1906–7, in round numbers, £81,000 ($405,000), exclusive of £22,000 for building purposes.

EDUCATION IN IRELAND.

NATIONAL ELEMENTARY EDUCATION.

The system of national education (elementary) in Ireland is under the direction of a board of education created in 1831, and organized in its present form in 1861. This board comprises twenty members, of whom ten must be Roman Catholics and ten Protestants. The only salaried member of the board is the resident commissioner, whose office is at Dublin. He is the executive head of the education

department, and upon him rests the responsibility of carrying out the details of the system of national education and also the administration of the government appropriations for the same. The schools under the supervision and fostering care of the board are supported by government and local funds. They may be denominational schools (i. e., Roman Catholic or Protestant), or mixed in respect to religion, but the rights of parents in the matter are strictly guarded by a conscience clause in the school regulations which provides that no child be allowed to attend a religious exercise of a denomination other than his own except upon the written request of the parent.

Grants to aid in building schoolhouses are allowed by the commissioners, but the grants in each case must not exceed two-thirds the estimated cost of the proposed structure, except in needy or congested districts. The government pays also the larger proportion of the salaries of teachers, requiring, however, a minimum annual augmentation from local funds of £12 ($60). Altogether the government bears about 94 per cent of the annual expenditure for the schools.

To avoid religious complications the department provides the textbooks for secular branches, which are issued at a small cost to the pupils.

For purposes of government supervision the country is divided into 60 districts, which are grouped in 6 divisions, each in charge of a head inspector. Under these are 29 district inspectors, 7 unassigned inspectors, and 14 inspectors' assistants and 1 inspector for drawing. Inspectors and their assistants are appointed upon examination testing their scholastic and professional qualifications.

Local civil authorities have no control over the schools. The local managers of schools, who are generally clergymen, come into direct relations with the board of commissioners. They appoint and dismiss teachers and arrange the details of the school work. Of a total of 3,035 managers in 1906, 2,419 were clerical.

The commissioners have direct control of a special class of schools called "model schools," for which they provide the buildings. "These schools, as their name indicates, are intended to afford models of the best methods of instruction and organization, and to serve as practice schools for students in training colleges or normal schools." They numbered 73 in 1906, with an enrollment of 9,320 day pupils, included in the enrollment given in the table below.

The compulsory school law, passed in 1892, has been imperfectly enforced, but recent efforts have been successful in bringing about improvement in this respect. According to the report of the commissioners for the current year, 182 school districts had attendance committees, and of this number 178 had been active in enforcing the compulsory law. There were 44 towns and 144 rural districts with-

out school attendance committees. In these the ratio of average attendance to average enrollment fell to 63 per cent, as compared with 70 per cent in the districts having school attendance committees.

As a means of encouraging school attendance, and also of prolonging the average period of instruction, the commissioners have recently issued a merit certificate. This certificate is offered to every pupil over 13 years of age who has been enrolled in the seventh standard for one year and who has, in the opinion of the inspector, attained to considerable proficiency in English, arithmetic, and geography. The inspectors have issued over 300 certificates, and the number of pupils in the seventh or higher standard has increased from 9,143 in 1904 to 16,931 at the end of the year 1906.

TABLE 16.—*Summary of the enrollment and average attendance in the national elementary schools of Ireland for the years named.*

Year.	Number of schools in operation.	Average number of pupils on rolls.	Average daily attendance.	Percentage of average daily attendance to average number on rolls.
1888	8,196	846,533	493,883	58.3
1892	8,403	815,972	495,254	60.7
1898	8,651	808,467	518,799	64.2
1899	8,670	796,163	513,852	64.5
1900	8,648	770,622	478,224	62.0
1901	8,692	754,028	482,031	63.9
1902	8,712	747,864	487,098	65.1
1903	8,720	741,795	482,489	65.0
1906	8,607	739,009	493,558	66.8

In the above table are included convent and monastery schools, which under certain conditions receive aid from the government. In 1906 they numbered 304, with a total enrollment of 112,451 pupils.

The schools of the Christian Brothers form a large part of the provision for elementary education, especially in the cities. Their system of education has taken deep hold upon the people, and they number among their former pupils influential men in every city and large town of Ireland.

TRAINING OF TEACHERS.

For the training of teachers for the national schools there are one national and six denominational normal schools, which receive grants in aid from the government. They report 1,170 students in training in 1906.

Of the total number of principal and assistant teachers, viz, 12,598, employed in 1906, 62 per cent had received professional training.

TABLE 17.—*Number and classification of teachers.*

	1887.	1903.	1906.
Principals:			
Males	4,672	4,656	4,560
Females	3,278	3,599	3,592
Total	7,950	8,255	8,152
Assistants:			
Males	867	1,088	1,220
Females	2,341	2,699	3,226
Total	3,208	3,787	4,446
Total principals and assistants	11,158	12,042	12,598
Junior assistants	44	11	1,494
Manual instructresses	.....	560	
Work mistresses and industrial teachers	539	502	247
Temporary assistants	177	29	73
Gross total	11,918	13,144	14,412

EXPENDITURE ON SCHOOLS AND TEACHING STAFFS.

According to the report of the commissioners for the year ending December 31, 1906, the aggregate annual expenditure on the schools from all sources, including Parliamentary grant, school fees, and local subscriptions, amounted to £1,399,432 3s. 11d., as shown in the following table. This would give an average of £2 17s. 3½d. for each child in average daily attendance during the year.

The following are the sources from which this expenditure was met:

	£	s.	d.
(*a*) From state grants:			
Grant for primary education	1,277,784	4	9
(*b*) From local sources:			
Subscriptions and endowments, etc. (toward incomes of teachers)	19,959	1	0
Subscriptions toward repairs, etc	63,975	13	6
Other sources	37,713	4	8
	121,647	19	2
Total from all sources	1,399,432	3	11
Rate per pupil from (*a*) state grants		2	12 3¾
Rate per pupil from (*b*) local sources		0	4 11¾
Rate per pupil from all sources		2	17 3½

SECONDARY EDUCATION.

An intermediate education board was established in 1878 for the examination of intermediate or secondary pupils. In 1906 the number of candidates for examination was 10,967 (7,790 boys and 3,177 girls), as compared with 7,608 in 1900. The number of students who passed the examinations in 1906 was 6,906 (4,906 boys and 2,000 girls). There was paid to the managers of the schools the sum of $250,625 (£50,125) on the results of the examination.

The annual income of the intermediate education board is made up of the interest on a Government fund of £1,000,000, placed at the disposal of the board, and a sum from the Irish share of the customs and excise duties, which averages about £50,000 ($250,000) annually.

TECHNICAL INSTRUCTION.

Technical instruction in Ireland is controlled by the department of agriculture and technical instruction, which has an advisory board of technical instruction. The income of the department consists of an annual appropriation of £166,000 and the interest on an original endowment of £205,000, together with such additional appropriations as may be allowed from time to time. The department aims at the coordination of its work with that of other educational authorities, and in 1906 its programme of experimental science was adopted in 267 secondary schools, with 10,866 science pupils. Central institutions under the department are the Royal College of Science, Dublin, and the Metropolitan School of Art. Throughout Ireland technical instruction is being organized under the councils of county boroughs, urban districts, and counties, in accordance with plans approved by the department.

Out of £55,000, which the department is required to appropriate annually for technical education, £25,000 is allotted to county boroughs and £30,000 for similar purposes elsewhere.

SYSTEM OF INSTRUCTION IN AGRICULTURE FOSTERED BY THE DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION.

The success of this department in developing and improving the agricultural industry in Ireland, and in creating an extended interest in the systematic study of agriculture, has attracted widespread attention. The principal features of the system of agricultural instruction maintained by the department are as follows: Itinerant instruction, agricultural schools and classes, the training of instructors and teachers, the maintenance of higher agricultural institutions and experiment stations. The following particulars respecting these features are derived from the report of the department for 1905–6:

ITINERANT INSTRUCTION.

While recognizing that itinerant instruction could not prove a substitute for schools and colleges, the department believed that this system afforded the most effective means for bringing the knowledge of the latest applications of science to agricultural practice within the reach of farmers who could not be included within the scope of methods of teaching intended primarily for the younger generation. Itinerant instruction has, besides, the advantage of preparing the way for more extensive courses of teaching and of creating that genuine demand for agricultural education which is so essential to its success. The county committees of agriculture in the several counties have been practically unanimous in adopting the programme of itinerant instruction, so that in the year under review out of thirty-three administrative counties thirty-one adopted the scheme of instruction in agriculture; twenty-seven counties made pro-

vision for instruction in horticulture; twenty-five adopted the scheme of instruction in butter making. The scheme of instruction in poultry keeping was adopted by every county committee with one exception. * * *

The main branches of the work of the itinerant instructor in agriculture are the delivery of lectures to farmers at rural centers during the winter months, the carrying out of agricultural experiments and demonstrations, and the visiting of farms for the purpose of giving advice to farmers. During the year under review the instructors delivered 1,169 lectures, which were attended by 66,114 persons, the average attendance being about 56. The instructors also superintended the laying down of 2,082 demonstration plots, and instituted 439 experiments on the principal crops. The visits paid to farms reached the total of 8,394, representing an average of 365 for each instructor. As the visits are undertaken only at the request of the farmers concerned, their number affords an index to the place which the instructor fills with reference to the agricultural industry of the county where he is employed. A considerable portion of the instructor's time is occupied in affording advice to farmers by letter, a course which is adopted when a personal inspection of the farm is unnecessary or not feasible at the moment. * * *

The instructors were also employed during the summer months as judges under the scheme of prizes for cottages and small farms.

AGRICULTURAL SCHOOLS AND CLASSES.

Agricultural schools and classes were maintained during the year under review in twenty-three centers, as compared with sixteen in the previous year.

In four counties where the scheme of itinerant instruction in agriculture had been in operation for several years, the courses were given by the itinerant instructors, whose ordinary lecture work was correspondingly reduced. Elsewhere special teachers of agriculture were provided by the department. The arrangements in connection with the courses varied somewhat from county to county according to the circumstances of each county. * * * Instruction in veterinary hygiene was provided wherever the services of a veterinary surgeon could be obtained.

The agricultural classes were held on two or three days in each week at the several centers. Instruction on five days in each week was given at Monaghan and at Downpatrick, where the winter schools alluded to in former reports were reopened for sessions of twenty weeks. The school at Monaghan is provided with a laboratory which gives facilities for experiments in chemistry and physics explanatory of the agricultural course.

The several winter schools and classes above mentioned were administered in conjunction with the county committees of agriculture. Agricultural education was also provided for at the college of the Franciscan Brothers at Mount Bellew, County Galway, where two courses of twenty weeks and twenty-one weeks, respectively, were held. This college does not receive any assistance from the funds administered by the county committees, but the department makes direct grants toward the payment of teachers and the provision of equipment for the agricultural course. * * *

It is interesting to note in connection with these classes that in some instances the students have, on leaving the class, formed themselves into associations for the discussion of agricultural topics and for the dissemination of information among the members. These associations are open also to farmers who had not attended the classes. The associations keep in touch with the itinerant instructors in agriculture and with the teachers of agricultural classes in their counties, and the members are often able to render valuable aid in the carrying out of the agricultural experiments in which they take a keen interest. In one county the association has provided a collection of books on agricultural subjects for circulation among the members, and it is probable that the example will be followed in other counties. * * *

SCHOOLS OF RURAL DOMESTIC ECONOMY.

Schools of rural domestic economy for the instruction of girls of the farming class in subjects appertaining to rural life were in operation during the year at Portumna, County Galway; Westport, County Mayo, and Loughglynn, County Roscommon. The course included dairying, poultry keeping, gardening, household management, cookery, laundry work, and needlework. At Portumna and Westport two distinct sessions, each of about five and a half months' duration, were held, and the schools were open to day pupils, who are admitted without fee, and also to resident pupils, who pay a fee of £3 3s. per session. At Loughglynn only day pupils are received, and arrangements are made whereby the instruction given can be availed of by housewives of the district as well as by the girls and young women. No fees are charged, but those attending the lessons are expected to bring with them to the school the materials required for practical instruction. The total attendance during the year was: Portumna, 30 resident and 56 day pupils; Westport, 10 resident and 75 day pupils; Loughglynn, 97 day pupils. * * *

TRAINING OF TEACHERS.

Although one of the first acts of the department was to make provision for the training of instructors it has not been found possible to keep pace with the constantly increasing demand, and some counties, consequently, were unable to obtain instructors during the year 1905–6.

The training of instructors and teachers at the Royal College of Science, the Albert Agricultural College, Glasnevin, and the Munster Institute was continued as in former years, and 27 students who completed during the year their courses at these institutions were passed as qualified for appointments.

The number of itinerant instructors at work in the year 1905–6 would have been somewhat larger were it not that several students who completed their training in 1905 had to be retained for the new educational institutions which the department put into operation during the year. * * *

ROYAL COLLEGE OF SCIENCE.

The teaching staff of the college at present consists of 8 professors, 5 lecturers, and 10 assistants, and the subjects of instruction are chemistry, physics, mechanical engineering, agriculture, mathematics, zoology, botany, and geology. The Albert Agricultural College (Glasnevin) is used in connection with the instruction in agriculture in the Royal College of Science. * * *

The course in the agricultural faculty extends over a period of three years, and is intended to enable the students to qualify for employment as itinerant instructors in agriculture, or as teachers of agriculture in the department's schools, or at the classes established at rural centers under the scheme of winter agricultural classes. In all, 29 students who took out this course are at present so employed. Thirty students are in attendance at the current, 1906–7, session.

The department offer annually for competition among the sons of farmers valuable scholarships, tenable at the college, which enable students to take out, free of expense, the full course in the agricultural faculty. Ten new scholarships were awarded for the session 1905–6 in addition to twenty-five scholarships gained in previous years, which were renewed for that session. The programme of the examination for these scholarships is particularly suitable for farmers' sons who have received a good secondary education and have, since leaving school, engaged actively in the work of the farm. If in addition they have gone through a preliminary course in technical agriculture, such as is provided at the Albert Agricultural College (Glasnevin), their prospects of securing scholarships are much improved. Special emphasis is laid on the actual experience of farm work required to qualify a candidate for the award of a

scholarship, proficiency in practical agriculture being taken into account in the case of those who may be deficient in some of the other subjects of the examination. This practice insures that the successful candidates possess, in their practical experience, an adequate foundation for the instruction in agricultural science which they will receive at the college. * * *

In addition to the scholarships that will be offered to students in agriculture, the department propose to award, in 1907, one or more scholarships of similar value to students who desire to specialize in forestry, horticulture, or creamery management. Candidates for these scholarships will be subjected to the same test as candidates for scholarships in agriculture, with the exception that an examination in horticulture, forestry, or creamery management will be substituted for that in practical agriculture.

The number of students in the agricultural faculty at the close of the session in June, 1906, was:

First year	10
Second year	13
Third year	11
Total	34

* * * The college is maintained by an annual parliamentary vote, the students' fees being appropriated in aid of the vote. Special provision is made at the college by means of scholarships, short summer courses and otherwise, for the training of teachers in science and technological subjects and in agriculture. During the session 1905–6 23 students qualified for the diploma of associate. The average number of students who attended the college during the five years from 1901–2 to 1905–6 was 123.

The short summer courses of instruction for teachers are held at the college, among other centers, during the summer vacation, and are designed to enable teachers of experimental science under the department's regulations to gain additional knowledge and skill, and to improve their general efficiency. The summer courses held at the college during the year 1906 were attended by 162 teachers.

ALBERT AGRICULTURAL COLLEGE, GLASNEVIN.

The course for agricultural students at the Albert Agricultural College (Glasnevin) has been extended to cover a period of eleven months, and the practice of holding two distinct sessions in each year has been discontinued. The twenty-five scholarships of £15 each, formerly awarded in connection with the examination for entrance to the summer session, were replaced by an equal number of scholarships of the value of £25 each, covering the extended session of eleven months. The scholarships were formerly divided in fixed proportions between the candidates from the several provinces. This rule was also altered, and all the scholarships offered in connection with the 1905–6 and 1906–7 sessions were open to candidates from any part of Ireland.

The increased duration of the session allows of a more thorough course being given. More time can be devoted to improving the general education of the students, while their presence at the college during almost the entire year enables the programme of instruction in technical agriculture to be arranged so as to deal in proper season with the several classes of farm operations. * * *

The number of students in attendance at the college during the year was as follows:

Agricultural course	34
Horticultural course	13
Royal College of Science students	10
Special creamery students	2
Special course in forestry and bee keeping	36

MUNSTER INSTITUTE, CORK.

The Munster Institute fulfills for female students the same function as that discharged by the Royal College of Science and Albert Agricultural College in respect of male students. The course of instruction embraces the subjects in which a girl of the farming class needs to be proficient, either for the performance of the work of her own home or for the discharge of the duties which may be allotted to her if she obtains employment in a dairy or a creamery. The course covered in two sessions, of about twelve weeks, is sufficient to give such students the dexterity in their work and the understanding of its principles which go to make a useful and intelligent worker. The training of such workers is the chief aim of the instruction given at the institute, but in addition it provides for the training of those who possess skill in practical work and the ability to impart instruction which fit them to act as itinerant instructors in poultry keeping or butter making, or as teachers in the schools of rural domestic economy which are being established with the aid of the department. For those who are likely to prove suitable for such employment, an additional course extending over three or four sessions is provided according to the student's proficiency.

Four sessions were held at the institute during the twelve months ended September 30, 1906. The total attendance thereat amounted to 190.

Eleven students who had passed the June examinations at the Irish Training School of Domestic Economy, and obtained certificates of qualification to teach domestic economy under the schemes administered by the technical instruction branch of the department, were admitted to a special course at the summer session at the institute. As these students intended to seek appointments in rural districts, the knowledge derived by attendance at a course of instruction in the work peculiar to such districts should prove of great assistance to them in their future career as teachers.

The demand for admission to the institute continues unabated. The number of names enrolled on the register of applicants on September 30, 1906, was almost 250, the figure recorded in the last annual report. * * *

AGRICULTURAL STATIONS.

Agricultural stations are situated at Athenry, County Galway; Ballyhaise, County Cavan, and Clonakilty, County Cork, where suitable farms have been acquired by the department. The last annual report mentioned that accommodation was being provided at these stations for the reception, as farm apprentices, of young men intending to become farmers, who would be provided with a course of practical training calculated to fit them for their future career. * * *

During the year an additional school of rural domestic economy was inaugurated at Westport, and arrangements were concluded for the opening of further schools of this nature at Ramsgrange, County Wexford, and Claremorris, County Mayo.

A special course of instruction in forestry and bee keeping was given at the Albert Agricultural College (Glasnevin) to county instructors in horticulture and to the students of this subject in attendance at the college. Some county instructors in poultry keeping who had not previously received special training in the fattening of poultry were allowed short courses in this subject at Avondale poultry station.

The purpose of the department to keep clearly in view the relation between the industrial arts, which it fosters, and the higher orders of scientific instruction and research is indicated by a memorandum recently drawn up at the request of the Royal Trinity College (Dublin), and the University of Dublin.

In this memorandum the department expressed their strong desire that the college should be connected with the university system, and they added that "whether the

system to be ultimately established is to take the form of a single federal university for all Ireland, with constituent colleges, or whether there is to be more than one university in the country, they feel that it would be practicable to arrange for an effective connection of the kind in either case, and that such arrangement will be of great advantage to the university system in Ireland as well as to the higher technical instruction which it is a special function of the Royal College of Science to provide."

UNIVERSITIES, COLLEGES, AND PROFESSIONAL SCHOOLS IN GREAT BRITAIN AND IRELAND.

Liberal education is provided in Great Britain and Ireland by universities and university colleges, and professional education by special schools of medicine attached to the principal hospitals and by schools of law and of theology.

The number of students in the universities and university colleges for specified years from 1897 to 1906 is shown in the following table:

TABLE 18.—*Attendance at universities of Great Britain and Ireland at specified dates.*

Universities and university colleges.	Students.					
	1897.	1899.	1901.	1903.	1905.	1906.
Great Britain:						
England and Wales—						
Oxford (22 colleges, 4 halls, and noncollegiate students)	3,408	3,466	3,481	3,570	3,648	3,663
Cambridge (17 colleges, 1 hostel, and noncollegiate students)	2,929	3,016	2,958	2,900	3,054	3,207
Durham	171	170	[a] 590	1,831	870	882
London [b]	.....	.....	6,889	6,083	8,287	6,960
Victoria (Manchester)	.....	.....	2,404	1,914	1,152	1,153
Leeds	.....	.....	.....	842	833	873
Liverpool	.....	.....	.....	667	790	887
Sheffield	.....	.....	.....	.....	1,711	1,583
Birmingham	.....	.....	677	814	850	818
University of Wales (3 colleges)	.....	.....	1,428	1,495	1,383	1,388
University colleges	13,411	11,301	[c] 4,311	.....	.....	5,278
University colleges for women	393	400	417	.....	443	452
Bedford College for Women [d]	192	170	.....	.....	.....	.....
Royal Holloway College for Women [d]	.....	110	.....	.....	.....	.....
Technical: City and Guilds of London (4 institutions) [d]	.....	1,592	.....	.....	.....	.....
Scotland—						
Aberdeen	755	765	755	814	830	840
Edinburgh	2,812	2,848	2,929	2,990	3,165	3,190
Glasgow	1,789	2,010	2,013	2,178	2,364	2,481
St. Andrews (2 colleges)	236	261	[a] 419	546	502	514
Dundee University College [e]	175	116	.....	.....	.....	.....
Glasgow (technical) College	286	268	298	314	[f] 530	535
Ireland:						
Dublin University	1,100	1,100	976	936	1,088	1,088
Belfast Queen's College	343	311	359	342	387	403
Cork Queen's College	206	188	171	199	232	246
University College, Dublin	.....	.....	.....	180	184	240
Galway Queen's College	105	91	97	97	97	112

[a] Three colleges.

[b] London University, reorganized as a teaching institution in 1900, includes University and King's colleges, 2 colleges for women (Bedford and Royal Holloway), 6 theological colleges or schools, Westfield College, East London College (recently admitted), the Royal Agricultural College, 12 medical schools, the City and Guilds Central Technical College, the Royal College of Science and the London School of Economics. In addition to the schools of the university there are a number of other institutions in London at which internal students are doing work, for which credit is given by the university. The number of students is incomplete as regards medical schools and evening classes.

[c] The greater part of the colleges formerly comprised under the head of university colleges have been gradually included under the following university organizations: London, Victoria, Durham, and Birmingham.

[d] Included in London University since 1900.

[e] Affiliated with St. Andrews in 1897, and since 1900 statistics included with those of St. Andrews.

[f] Not including 4,490 evening students.

NOTABLE EVENTS OF THE YEAR.

The year under review has been characterized by important movements looking to the increase of university resources in England and in Scotland.

The parliamentary appropriation for University Colleges, which has been continued annually since 1889, has been raised from £27,000 to £100,000. The greater number of these colleges, as indicated in the above table, have been incorporated in the universities recently established in the north and midland sections of England. The special equipment of these institutions for scientific study and research has emphasized the need of larger resources for the older universities.

Oxford.—Lord Curzon marked his acceptance of the chancellorship of Oxford University by an appeal for £250,000 ($1,250,000) to supply pressing demands. Among the needs specified in the appeal are the means of making the contents of the Bodleian library accessible to students, and provision for supplying glaring defects in the equipment for science. The university has no electrical laboratory, hence it can not give men the training which will fit them for the profession of engineer. The appeal mentions also the study of hygiene, which in an age of great cities, of multiplying diseases, and of a civilization which does not always minister to health, gains new importance every year; and of scientific agriculture, which has a special claim upon a university in which the students are largely drawn from the landowning classes.

The relations of this university to the socialistic movements of the time was marked during the year by the conference at the Workers' Educational Association, which was started at Oxford four years ago, and met at Oxford again in August last in connection with the university extension meeting. According to current reports the conference represented 210 organizations, of which the majority were trade unions and trade councils. The trend of the discussions is summed up in the sentence, "the great function of the universities is to educate the governing classes, and the governing classes are those that are represented in this organization." In accordance with this idea a committee was formed, "with instructions to report before next Easter as to the best means of carrying out the desired union of labor and learning in the university."

Cambridge.—As chancellor of Cambridge University, the Duke of Devonshire early in the year issued a public appeal for funds with which to meet urgent financial needs. After acknowledging the progress already made in the equipment of several departments, the chancellor says:

> I desire to draw attention to the fact that few of the other wants keenly felt in 1899 have yet been met, and in certain cases new wants have inevitably arisen during the last seven years. In the scientific departments every year must of necessity bring new

demands for specialization in teaching and for the provision of facilities for research. In some departments, notably those of agriculture, engineering, and chemistry, the number of students has greatly increased and additional accommodation is required. The demands of the departments which represent the humanities are not less urgent. The school of economics is attracting students for whom fuller provision is a necessity; and modern languages, oriental languages, history, and archæology and ethnology put forth claims the legitimacy of which is incontestable; while even the older studies, such as classics, mathematics, law, and divinity, are not fully equipped. [There follows a detailed enumeration of pressing needs which are summed up as follows:] In all, a capital sum of nearly one million and a half, apart from any question of a pension fund for professors, might without extravagance be immediately expended on the equipment of and on the provision of staff for the University.

London.—One of the most interesting events in university circles in Europe during the year was the visit of representatives of the University of London to the University of Paris, returning the visit made last year by the Paris University to that of London. At Paris the university, the city, and the state authorities vied with each other in attentions to their English guests. In spite of the fact that the Paris University is the oldest in Europe, and London one of the youngest of those that have achieved renown, they possess many features in common, which were emphatically noted in the several addresses that marked the welcome exercises of the first day of the visit. As pointed out by Sir Edward Busk, vice-chancellor of the University of London, both universities have been reorganized within the past decade, both are situated in the capitals of their respective countries, and exercise their functions—research, instruction, and examination—in the midst of immense populations, abandoned almost entirely to the pursuit of other interests than those of education; both universities are also surrounded by other institutions, public and private, of superior education, and a great number of learned societies, having very little relation to the universities themselves.

All the speakers on this auspicious occasion recognized that one chief mission of universities is to promote universal harmony through the consciousness and the possession of common ideals.

The Imperial College of Science and Technology obtained a charter in July last. Its purpose, as stated in the report of the board of education, is to make provision for the most advanced training and research in science, especially in its application to industry. The Royal College of Science, the Royal School of Mines, and, subject to special conditions detailed in the charter, the City and Guilds College, are placed under the control of the governing body. Power is given to the governing body to establish new colleges or other institutions or departments of instruction, and, subject to certain conditions, to recognize any existing college or institution as being in association with the Imperial College.

On the question of the relation of the Imperial College to the University of London, the charter provides that, "subject to compliance with the statutes of the University of London and pending the settlement of the question of the incorporation of the Imperial College with the university, the Imperial College shall be established in the first instance as a school of the university."

Relation of Lord Kelvin to Glasgow University.—The death of Lord Kelvin, which occurred on the 21st of December, 1907, fell with peculiar heaviness on the University of Glasgow, with which he had been associated, first as student and then as professor, for more than half a century.

The following particulars of the life of this distinguished scientist are derived from current sources:[a] He was the son of James Thomson, LL. D., an eminent teacher of mathematics. He was born at Belfast June 26, 1824; soon after his birth the father was appointed professor in the University of Glasgow, and here the future Lord Kelvin received his education. At the age of 18 William Thomson, as he then was, proceeded to St. Peter's College, Cambridge, where he became first Smith's prizeman and second wrangler, won the Colquhoun Sculls, and was elected president of the musical society. After leaving Cambridge he studied in France, then, as always, the mecca of brilliant mathematicians, and worked for nearly a year in the laboratory of the famous Regnault. An offer of the chair of natural philosophy at Glasgow caused him to return thither, and he held the appointment from the age of 22 until his resignation in 1899. At that time he applied to the Senatus Academicus to be appointed a research student, so that his name remained to the last upon the college roll. In 1903 he was elected chancellor of his beloved alma mater. The week of his death was marked by impressive ceremonies at the university, which regretfully acquiesced in the arrangement for his burial in Westminster Abbey. Telegrams of condolence with the university for the loss it had suffered were received during the week from all the leading universities and scientific societies of the world.

According to his great contemporary, Helmholtz, the distinguishing characteristic of Lord Kelvin's mind was "the gift of translating real facts into mathematical equations and vice versa," which, on the same authority, "is far rarer than the capacity for finding the solution of a given mathematical problem." Hence he did much to break down the dividing line between mathematics and physics. This faculty enabled him to interpret the experimental phenomena of electricity into the precision of mathematical terms, which in turn suggested further experimenting, and in this way he made many discoveries of technical importance in electricity. He was, on his practical side, the consulting electrician to Atlantic cable companies, and

[a] Athenæum, December 21, 1907, p. 803. Nature, January 2, 1908, p. 200.

made many inventions, both of the most delicate electrical instruments and apparatus for scientific investigations, and of technical apparatus to be used in industries, such as improvements in the Atlantic cable, electric lighting, ships' compasses, etc. On the other hand, he was equally great in speculation, and through his theories of the constitution of matter was one of the greatest scientific philosophers of the nineteenth century. A writer in Nature says:

> He will be known to future ages, possibly even more widely, as a main pioneer and creator in the all-embracing science of energy, the greatest physical generalization of the last century. * * *
>
> In Lord Kelvin there has passed away one of the last commanding figures, perhaps in genius and the variety of his activities as great and memorable as any, in the scientific and intellectual development of the nineteenth century.

PARTIAL LIST OF RECENT PUBLICATIONS BY THE BOARD OF EDUCATION (ENGLAND).

PUBLICATIONS RELATING TO ELEMENTARY SCHOOLS.

Building regulations; being principles to be observed in planning and fitting up new buildings for public elementary schools. London, Wyman and Sons, 1907, 16 p. F° (Gt. Brit. Parliament. Papers by command, cd. 3571).

Code of regulations for public elementary schools in England (exclusive of Wales and Monmouthshire), with schedules. London, Wyman and Sons, 1907, 46 p. 8° (Gt. Brit. Parliament. Papers by command, cd. 3594).

Reports on children under five years of age in public elementary schools. By women inspectors of the board of education. London, Wyman and Sons, 1905, 155 p. 8° (Gt. Brit. Parliament. Papers by command, cd. 2726).

Report of the consultative committee upon higher elementary schools. London, Wyman and Sons, 1906, 55 pp. F°.

Special report on the teaching of cookery to public elementary school children in England and Wales. By the chief woman inspector of the board of education. London, Wyman and Sons, 1907, 20 p. 8°.

Suggestions for the consideration of teachers and others concerned in the workof public elementary schools. London, Wyman and Sons, 1905, 155 p. 8° (Gt. Brit. Parliament. Papers by command, cd. 2638).

Suggestions on rural education. Together with some specimen courses on nature study, gardening, and rural economy. By T. S. Dymond. (Jan. 11, 1908.) London, Wyman and Sons, 1908, 54 p. 8°.

Welsh Department. Code of regulations for public elementary schools in Wales (including Monmouthshire), with schedules. London, Wyman and Sons, 1907, 49 p. 8° (Gt. Brit. Parliament. Papers by command, cd. 3604).

PUBLICATIONS RELATING TO THE TRAINING OF TEACHERS.

General report on the instruction and training of pupil-teachers, 1903–7, with historical introduction. London, Wyman and Sons, 1907, 217 p. F° (Gt. Brit. Parliament. Papers by command, cd. 3582).

Memorandum on the history and prospects of the pupil-teacher system. London, Wyman and Sons, 1907, 29 p. F°.

Regulations for the instruction and training of pupil-teachers. (In force from August 1, 1906.) London, Wyman and Sons, 1906, 36 p. 8°.

Regulations for the preliminary education of elementary school teachers. (In force from August 1, 1907.) London, Wyman and Sons, 1907, 46 p. 8°.

Regulations for the training of teachers of domestic subjects. London, Wyman and Sons, 1907, 16 p. 8°.

Regulations for the training of teachers and for the examination of students in training colleges. London, Wyman and Sons, 1906, 77 p. 8° (Gt. Brit. Parliament. Papers by command, cd. 3049).

Welsh department. General report on the instruction and training of pupil-teachers in Wales (including Monmouthshire). London, Wyman and Sons, 1907, 33 p. 8° (Gt. Brit. Parliament. Papers by command, cd. 3814).

PUBLICATIONS RELATING TO SECONDARY SCHOOLS.

Regulations for secondary schools. (In force from August 1, 1907.) Wyman and Sons, 1907, 19 p. 8° (Gt. Brit. Parliament. Papers by command, cd. 3592).

Teaching of Latin in secondary schools. Circular 574, Wyman and Sons, 1907, 4 p. F°.

Welsh department. Regulations for secondary schools. (In force from August 1, 1907.) Wyman and Sons, 1907 (Gt. Brit. Parliament. Papers by command, cd. 3643).

SPECIAL REPORTS. RECENT VOLUMES IN THE SERIES.

School training for the home duties of women. London, Wyman and Sons, 1906–7, 3 v. 8°. (Special reports on educational subjects, v. 15, 16, 19 (Gt. Brit. Parliament. Papers by command, cd. 2498; cd. 2963; cd. 3860). Contents: Pt. I, The United States; Pt. II, Belgium, Sweden, Norway, Denmark, Switzerland, and France; Pt. III, The domestic training of girls in Germany and Austria.

School exercises and vacation schools. London, Wyman and Sons, 1907, v. 21, 89 p. 8°. (Special reports on educational subjects. Gt. Brit. Parliament. Papers by command, cd. 3866).

Schools, public and private, in the north of Europe. London, Wyman and Sons, 1907, v. 17, 136 p., 8°. (Special reports on educational subjects. Gt. Brit. Parliament. Papers by command, cd. 3537).

The education and training of the French primary school teacher. London, Wyman and Sons, 1907, v. 18, 222 p. 8°. (Special reports on educational subjects. Gt. Brit. Parliament. Papers by command, cd. 3777).

CHAPTER IV.

EDUCATION IN FRANCE.[a]

France, Republic: Area, 204,092 square miles; population, 39,252,267 (1906). Civil divisions having special functions in educational administrations: Departments (90 in number, including 3 in Algiers), communes (cities or villages).

TOPICAL OUTLINE.

Introduction: Importance of the present year (1907).—Readjustments growing out of the law of separation.—Proposed legislation respecting private schools.—Scope of public education.—Principal features of the system under the minister of public instruction.—Statistical summary.—Principal events of the year (1907).

Department of primary instruction: Laws pertaining to the system.—Formal organization.—Statistical summary: Pupils and teachers; appropriations and expenditures; statistics of primary schools of Paris.—Scholarships for primary pupils.—Supplementary education: Continuation classes; the People's University.—Unsatisfactory state of school attendance.—Features of chief interest to other nations; the teaching service.

Department of secondary education: Scope.—Statistics.—Recent reforms of secondary schools for boys: Classes of schools affected; the Ribot commission; characteristic features of the lycée organization; changes in the internal organization and scheme of studies; results of the reforms in organization as regards: The proviseurs (principals); the répétiteurs; the surveillants.—The baccalaureate examination; failure of candidates; proposed modifications.—State provision of secondary schools for girls.

Department of higher education: The higher institutions pertaining to the general system of education.—Statistics, current and comparative.—The State Universities: development; government; stimulating effect of the new régime.—Present needs: general need of resources; special needs of the medical faculties.—The École Normale Supérieure.—Efforts in the interests of foreign students.

Technical and industrial schools: Statistical summary of technical and industrial schools not under the charge of the minister of public instruction.

Sources of information.—Reports and other publications consulted in the preparation of the chapter.

INTRODUCTION.

The present year, 1907, may be said to mark the beginning of a new era in the history of education in France, as a consequence of the changed relations between church and state. The church which, prior to the French revolution, was the great teaching agency of the nation, shared with the state the control of this interest from the establishment of the third republic, 1870, to the close of 1906. The several measures, beginning with the associations law of July 1, 1901, and ending with the law of December 5, 1905, providing for the complete separation of church and state, have practically left the latter in undisputed control of this interest.

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[a] For complete index to articles on Education in France in the Annual Reports of this Office from 1889 to 1903, inclusive, see Report for 1905, Vol. I, chap. 4, pp. 57–8. For more recent articles see: Report of the Commissioner for 1905, Vol. I, chap. 4, pp. 57–86; chap. 5, pp. 87–95. Report for 1906, Vol. I, chap. 11, pp. 19–34.

The law of separation became effective in December, 1906, and hence the readjustments that it necessitates have begun during the year under review. The increased efforts and expenditures that would be required if the suppression of all clerical schools, or schools maintained by the religious orders, should be complete, are indicated by the fact that in 1905 above 18 per cent of the pupils in primary education were enrolled in private schools, and in 1901—the latest year for which statistics are available—more than 50 per cent of the young men in secondary schools. The private schools were mostly schools conducted by the religious orders, and even those that were classified as secular were known to be, as a rule, under clerical auspices. The influence of the religious orders was exercised chiefly in the province of secondary education. But the term secondary, it must be remembered, is used in France in a sense quite different from its use in this country. It pertains to establishments that admit boys at ten or eleven years of age, and retain them through the entire course of general education which leads to the bachelor's degree. The students live in the schools, hence their habits of thought and action are determined by the institutional life. Although the clerical schools derived no direct support from the Government, they profited indirectly by the annual appropriations from the public treasury for church purposes. The loss in this respect is naturally enormous, as is shown by the fact that whereas appropriations for public worship amounted in 1905 to 42,324,933 francs ($8,464,986), they were reduced for the year ending April 1, 1907, to 543,130 francs ($108,026). The clerical schools also had the use of properties belonging to the church, the final disposition of which property is still an unsettled matter.

The question naturally arises, what has become of the 62,000 secondary students that formerly were enrolled in the schools of the religious orders? From partial reports that have already been made, it appears that since 1901, the year of the passage of the associations law, public secondary schools have had an increase of 16,642 students in their attendance, and private secular institutions an increase of 3,456 students. These 20,000 students are a minority only of the entire number who formerly attended the clerical schools. The rest have still to be accounted for.

In a report recently issued, M. Steeg, a member of the Chamber of Deputies, expresses the opinion that quite a large proportion have entered the higher primary schools; many others have followed their clerical teachers across the border, especially into Belgium.

It is further noted by M. Steeg that in the large cities, and particularly in Paris, many boarding establishments of a semireligious character have been recently opened, in which former students of the suppressed schools reside, under the general charge of clerical

guardians who conduct them to the public lycées for their secular instruction, but reserve to themselves their moral training and the duty of forming their character.

It is generally admitted that private schools will continue to educate a large proportion of the youth of France; custom and sentiment are too strong in this respect to be overcome; but the bill introduced into the legislature during the present year,[a] requiring additional guaranties of fitness from all persons who may apply for permission to open such schools, indicates the intention of the Government to keep close watch over this independent work. The bill especially provides that neither the head master nor his assistants shall be members of a religious order (cong égation).

Public education constitutes in France a highly centralized system, including all the schools, colleges, and universities for general and professional education that are supported in whole or in part by the State and are under the control of the minister of public instruction.

Public provision for technical and industrial education is also made in schools under the direction of the ministries of commerce, of labor, and of agriculture; the great engineering schools and other technical schools pertaining to the military and naval services are under the corresponding ministries.

The present chapter is limited to a review of the general system of public instruction, called collectively the University of France, with incidental reference to, or summarized statistics of private schools and those under the other ministries named.

PRINCIPAL FEATURES OF THE SYSTEM UNDER THE MINISTER OF PUBLIC INSTRUCTION.

In the general system of public instruction local control and direction are reduced to a minimum. The central authority is all-pervading and is maintained by an elaborate official machinery of which the principal features are derived from the imperial university, established by Napoleon (1808) but modified by successive governments. These features are here briefly outlined, with reference in each case to the date of its origin, or of the adoption of its present form.

Control of the system is vested in a cabinet officer, whose full title is minister of public instruction, fine arts, and public worship, the last-named portfolio having been reassigned to the ministry by a decree of January 24, 1905.[b] The minister authorizes the establishment of schools and higher institutions, nominates the highest officials in the

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[a] Le Projet de loi sur l'enseignement secondaire privé. (L'Enseignement secondaire, June 1, 1907, p. 211.)

[b] As this chapter goes to press, information is received of the decree of January 4, 1908, transferring public worship to the ministry of justice. By a second decree of the same date M. Aristide Briand, who was appointed minister of public instruction, fine arts, and worship in 1905, is made Garde des Sceaux (secretary of state), with which is combined the ministry of justice and of worship. M. Doumergue is made minister of public instruction and fine arts.

service, who are appointed by the President of the Republic, and himself appoints, either directly or by delegated authority, the great body of officials, professors, and teachers engaged in the service. His jurisdiction extends also in a measure to private schools and to the special semipublic schools maintained by municipalities, trade guilds, etc. (Office created August 16, 1824.)

The various interests included in the ministry form separate departments, each under its own chief or director, who is nominated by the minister but appointed by the President of the Republic (organic decree of January 18, 1887). These directors are generally retained through all changes of the cabinet, and thus give stability to the administration. There are three departments for education, corresponding respectively to the three orders of instruction, namely, higher, secondary, and primary.

The central administration also includes:

(1) The corps of general inspectors—at present 26 in number, besides 4 inspectresses-general for infant schools—appointed in the same way as the directors, and assigned to the seven inspectorial districts into which France is divided, at the discretion of the minister, to whom they report directly. (Service dates from the law of March 15, 1850.)

(2) The superior council, consisting of 60 members, of whom three-fourths are chosen by their peers from the three orders of instruction, the remaining number being appointed by the President upon the advice of the minister. The functions of the council are deliberative, advisory, and, in respect to certain cases, judicial and disciplinary. (Organized in its present form by law of February 27, 1880.)

The minister is also assisted by an advisory committee, the "comité consultatif," a commission of experts, as it were, consisting of the general inspectors, acting or honorary, and of eminent members of the teaching profession designated by the minister. (Decrees of March 25, 1873, and May 11, 1880.)

For local administration the system is divided into seventeen circumscriptions called academies. At the head of each academy is a rector, appointed like the minister, by the President of the Republic. The rectors, who are immediately responsible for secondary and higher institutions, are assisted by academic councils, the members of which are chosen from the inspectors and professors belonging to the respective academies. (The division into academies dates from the imperial system of 1808. The present division was determined by law of June 14, 1854; the present constitution of the academy councils by law of February 27, 1880.)

The Departments, civil divisions of France, 90 in number (including 3 in Algiers), form minor districts within the academies for the administration of primary education.

STATISTICAL SUMMARY.

The extensive operations of the system are indicated by the following summary of pupils and students in the public schools and higher institutions which are under the immediate jurisdiction of the minister. With the summary is combined also the enrollment in private institutions, over which the minister exercises a measure of supervision.

Public primary schools, not including infant schools, enrolled 4,513,214 pupils in 1905, the latest year covered by official report. The enrollment in private primary schools, viz, 1,054,816, raises the total enrollment to 5,568,030.

The State secondary school for boys (lycées) and municipal colleges enrolled 95,561 pupils; private secondary institutions, 55,136; making a total of 150,697 students in the secondary institutions for young men. Public secondary schools for girls (lycées and local colleges), together with organized courses of secondary instruction, enrolled 32,607 students.

State universities registered in 1905 a total of 33,615 students; the higher special schools of university grade, approximately 600 students (not including hearers only).

The grand total of children and youth pursuing their studies in schools under the control of the Government was thus, it appears, 4,675,597, and in private or independent institutions, so far as reported 1,109,952.

For the maintenance of the system of public schools, colleges, and universities, including the elaborate administrative service, the Government, in 1906, appropriated in round numbers 239,000,000 francs ($47,800,000). The appropriation through the ministry for fine arts and worship referred to above, viz, 9,330,000 francs, raised the total to 248,330,000 francs ($49,666,000).[a]

Detailed statistics, so far as officially reported, are given in connection with the accounts of the three departments of public instruction, separately considered in the pages that follow.

CHIEF EVENTS OF THE YEAR.

As regards the system as a whole the chief events of the year under review relate to measures intended to raise the average attendance in the primary schools; to the continued discussion of the scheme of secondary education; and in the department of higher education to efforts looking toward needed reform in the courses of instruction in the medical faculties and to their equipment for professional education. These measures are particularly considered in connection with

[a] The statistics of enrollment above given are from the Annuaire statistique, 1906, published by the ministry of labor. The financial statistics are from the report of the chairman of the financial committee of the Chamber of Deputies, M. Couyba, on the budget for 1907.

the review of the work of the three departments of the ministry (enseignement primaire, enseignement secondaire, enseignement supérieur) to which they respectively pertain.

DEPARTMENT OF PRIMARY INSTRUCTION

LAWS RELATING TO THE SYSTEM.

The system of public primary schools in France rests upon the law of June 28, 1833 (called Guizot's law in memory of its distinguished author), which is regarded as the charter of primary education in France. This law required every commune to establish at least one primary school; communities having a population of 6,000 and upward to establish a higher primary school; and every department to establish a primary normal school for men. The law of March 15, 1850, added to these provisions the requirement that every commune of 800 or more inhabitants should maintain also a primary school for girls; by a law of April 10, 1867, the requirement was extended to include all communes of 500 or more inhabitants. These laws were in force when the third Republic was formed.

The principal laws by which the Republic has developed the system of primary instruction to its present character and proportions are as follows: Law of August 9, 1879, requiring every department to maintain a second normal school (this for women); law of June 16, 1881, making instruction gratuitous, and requiring teachers to be provided with State diplomas; law of March 28, 1882, making primary instruction compulsory for all children and strictly secular in public primary schools; law of October 30, 1886, regulating all details of school inspection, teaching, attendance, etc., and prohibiting the appointment of clerical teachers; law of July 15, 1899, providing that the salaries of teachers should be paid by the State, and the financial laws of March 30, 1902, March 31, 1903, and April 22, 1905, providing for the regular promotion of teachers and the increase of their salaries.[a]

ORGANIZATION.

The unit of primary school administration in France is the department—a civil district which for educational purposes is treated as a subdivision of an academy. There are in all 90 departments (including three in Algiers), which are unequally distributed among the 17 academies. Each department includes two normal schools (one for men and one for women), unless authorized to combine with another department for this purpose, and the several classes of primary schools.

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[a] For text of the several laws from 1833 to 1886, inclusive, see La Législation de l'instruction primaire en France depuis 1789 jusqu'à nos jours, par Octave Gréard. Recueil des lois, décrets (etc.). Paris, 1892–1902. 7 v. 8°.

For the text of the laws for later years see Bulletin Administratif for the years specified

The civil head of a department and the head also of its school affairs is the prefect, appointed by the President of the Republic, and the only political official in the long series of those who pertain to the State teaching service. Around his prerogatives—especially the most important prerogative of appointing teachers (law of March 15, 1850)—is waged a perpetual conflict, but so far with the result only of limiting his power by the advisory functions of the academy inspector and the departmental council of public instruction. (Law of Oct. 30, 1886.) The council named consists of 14 members (the Department of Seine has more), including 4 members from the civil council of the department, elected by their colleagues, 2 primary inspectors designated by the minister, the directors of the two normal schools, 4 teachers (2 men and 2 women) elected by their colleagues, and, when matters are under discussion affecting private schools, 2 members representing the same, one clerical, the other lay. Of this council the prefect is president and the academy inspector vice-president.

The council has disciplinary powers over teachers, but in case of dismissal or other severe penalty the teacher has the right of appeal to the superior council. The academy inspector submits, as a rule, the propositions upon which the decisions of the council and the executive orders of the prefect are based. This official is, in general, the controlling spirit in the administration of primary schools. He is assisted by a corps of primary inspectors. Women may be appointed to the inspectorate. (Law of July 19, 1889.)

The communes, cities and villages, are obliged to establish at least one public primary school, but, excepting in the case of cities with more than 150,000 inhabitants, have no authoritative control over their schools. (Laws of June 28, 1833, and Oct., 1886.)

The present director and responsible head of the department of primary instruction is M. A. Gasquet; the administrative service of this department is organized under five bureaus, each comprising a chief, assistant chief, and a large clerical force.

SUMMARIZED STATISTICS OF PRIMARY INSTRUCTION.

The status of the primary schools is set forth in the following statistical review, compiled from the latest official report, covering the year 1904–5, and including comparisons in respect to salient particulars with previous years.

NOTE.—The schools belonging to the department of primary instruction are classified as maternal schools, elementary and higher primary schools, and primary normal schools.

Private schools of the same grades exist by sanction of the Government, and are subject to State supervision with respect to the competency of teachers, sanitary requirements, etc. (Law of October 30, 1886.)

NUMBER OF PUPILS AND TEACHERS.

The enrollment in the infant or maternal schools, public and private (ages 2–6), in 1904–5, was 670,687, a decrease of 9,302 from that reported for the previous year. The establishment of this class of schools is optional with the communes.

The following tables (Tables I and II) give the latest published statistics of pupils and teachers in the primary schools, the establishment of which is obligatory upon the communes, and the primary normal schools, which are established by the departments.

TABLE I.—*Number of pupils and teachers in primary schools and primary normal schools, 1904–5.*

Institutions.	Date.	Enrollment.			Teachers.		
		Male.	Female.	Total.	Men.	Women.	Total.
Primary schools, elementary (ages 6–13), and high (ages 13–16):							
Public	1904–5	2,442,598	2,070,616	4,513,214	57,331	54,817	112,148
Private	1904–5	360,001	694,815	1,054,816	9,003	29,716	38,719
Total primary schools	.....	2,802,599	2,765,431	5,568,030	66,334	84,533	150,867
Primary normal schools (ages 16–19)	1905	4,403	4,976	9,379	.....	.....	.....

TABLE II.—*Number of pupils and teachers in the primary schools at specified dates.*

Year.	Total number of pupils.[a]	Boys.	Girls.	Total number teachers.[a]	Men.	Women.
1876–77	4,716,935	2,400,882	2,316,053	110,709	51,717	58,992
1881–82	5,341,211	2,708,510	2,632,701	124,965	58,137	66,828
1886–87	5,596,919	2,829,127	2,767,792	138,655	64,039	74,616
1891–92	5,556,470	2,805,849	2,750,621	146,674	66,363	80,311
1896–97	5,531,418	2,782,547	2,748,871	.....	.....	.....
1900–1901	5,526,800	2,764,625	2,762,175	157,517	67,895	89,622
1903–4	5,554,208	2,794,128	2,760,080	153,226	67,148	86,078
1904–5	5,568,030	2,802,599	2,765,431	150,867	66,334	84,533

[a] Infant schools not included. Algiers not included prior to 1886–87.

The total enrollment in the primary schools, 5,568,030, was equivalent to 14.18 per cent of the population, a slight increase over the corresponding percentage for the previous year. It should be observed that this proportion is more liberal than it appears, since the ratio of child population to total population in France is lower than in other countries.

Higher primary schools.—The enrollment in the primary schools includes 44,183 pupils (27,523 boys and 16,660 girls) in higher primary schools and in higher supplementary classes not yet organized as schools.

APPROPRIATIONS AND EXPENDITURES.

The State appropriations for public primary instruction amounted in 1905 to 186,639,730 francs ($37,327,940); in 1906 to 196,715,815 francs ($39,343,163), including 10,825,744 francs ($2,165,148) for

aid to communes, cities, and departments in meeting payments on loans for the construction of school buildings. It is estimated that the additional appropriations made by the departments and communes would increase the total to nearly 265,000,000 francs ($53,000,000). The latest complete financial reports are for the year 1902, when the total current expenditure for this service was 236,598,969 francs ($47,319,793), of which the State furnished 65.5 per cent.

STATISTICS OF THE PRIMARY SCHOOLS OF PARIS.

The following statistics, pertaining exclusively to Paris, show that in 1904–5 the primary schools of the Capital enrolled 240,169 pupils, equivalent to 8.8 per cent of the population (2,722,731, census of 1906). This low ratio, which is below that for the country at large, is due to the fact that only the children of the poorer classes in the city attend public primary schools.

The enrollment in the maternal or infant schools of Paris, as given in the table, was equal to nearly one-tenth that of the entire country; but the enrollment in the primary schools was only equivalent to 4 per cent of the total enrollment.

It should be observed that in the great cities, the children of the professional classes, merchants, officials, etc., receive their elementary instruction in the preparatory divisions of the lycées or of the private secondary institutions. Such preparatory divisions in the public secondary schools of Paris enrolled in 1904 a total of 2,415 boys and 948 girls, or, altogether, 3,363 pupils in the primary stage.

TABLE III.—*Statistics of the infant and primary schools of Paris for 1904–5.*

Schools.	Number.	Teachers.	Pupils.
Infant schools (écoles maternelles):			
Public	168	[a] 836	58,393
Private	49	[a] 93	8,478
Total	217	929	66,871
Primary schools:			
Public—			
Boys	203	[b] 1,843	90,555
Girls	200	[a] 1,869	82,461
Total	403	3,712	173,016
Private—			
Boys	121	[b] 447	18,344
Girls	549	[a] 2,147	48,809
Total	670	2,594	67,153
Total primary	1,073	6,306	240,169

[a] Women. [b] Men.

SCHOLARSHIPS FOR PRIMARY PUPILS.

The State appropriation for primary education given above included 714,800 francs ($142,960) for scholarships (bourses) intended to aid young students of ability to continue their studies in higher primary schools. The schools of this class, especially outside the large cities, have boarding departments in which the annual charges for living range generally from 400 to 800 francs ($80 to $160). The scholarship funds are intended to meet these charges (bourses d'internat), or to provide for the subsistence of day pupils at home (bourses d'entretien) or with a family convenient to the school (bourses familiales).

These scholarships are obtained by competitive examination, which is quite severe. The total number awarded in 1905 was 1,054 (519 to boys, 535 to girls) on a total of 5,407 candidates, of whom only 3,101 were admitted to examination. A few scholarships are also annually awarded upon competitive examinations to students who have completed the course of the higher primary schools and will continue the study of a modern language in a foreign country. Of 11 students who in 1905 were successful in this examination, 5 were sent to England and 6 to Germany.

SUPPLEMENTARY EDUCATION.

CONTINUATION CLASSES.

Within the department of primary instruction are included the courses of instruction for youths and adults (cours d'adultes et cours d'apprentis), called collectively éducation post scolaire, or œuvres complémentaires, which terms are similar in their application to the English expression "continuation schools." Great freedom is allowed in respect to the establishment and conduct of these classes, which are held in the evening and generally at the public schools. The regulations simply place the minimum age for admission at 13 years (decree of January 13, 1887). Anyone who desires may open a class, provided he has the approval of the mayor of the commune, the prefect of the department, and the academy inspector. Although there is a strong feeling that attendance upon these classes should be made compulsory up to 17 years of age, and for a fixed annual term, efforts to this end have thus far failed. Anyone attends who wishes, and as long as he likes, the only inducements being the social attraction, the desire for improvement, or interest in obtaining the certificate of attendance, which carries weight with employers, and the value of which is often enhanced by a prize given by some private individual or by the local authorities. Separate classes are generally maintained for men and for women, but mixed classes are frequently held in the larger towns.

Complaint is made of the difficulty of securing adequate funds for putting this work upon a firm basis. The people who need the instruction are seldom able or willing to pay even small fees, and the receipts from this source steadily diminish. The State makes an annual appropriation for the work, which amounted in 1906 to 600,000 francs ($120,000); but the chief sources of support are private subscriptions and the subsidies granted by local authorities. The instruction is given chiefly by public school teachers, who, as a rule, perform this service without extra compensation. They are encouraged, however, by purely honorary rewards, such as official letters of recognition, diplomas, medals, decorations, etc., which are greatly prized by the recipients.

The number of persons in attendance upon these courses of instruction in 1905–6 was estimated at 530,000 in round numbers, of whom about four-fifths were regular pupils.

The most decided advance toward the systematic organization of this work is the division of the classes into "cours d'adultes," which are simply classes for the illiterate, continuation classes proper (cours complémentaires), and technical classes (cours techniques). The latter, which are found chiefly in the large cities, are conducted Sundays as well as evenings during the week and generally in the workshops attached to the public schools. In 1905, twelve such centers of technical instruction were maintained in Paris, with above a thousand pupils.

Many private societies are also engaged in maintaining continuation classes, or courses of instruction for adults and for apprentices. The most important of these are: In Paris, the Society for Elementary Instruction, the Polytechnic Association, the Philotechnic Association, and the Union Française de la Jeunesse; at Havre, the Popular Education Society; at Lyon, the Société d'Enseignement Professionnel du Rhône.

THE PEOPLE'S UNIVERSITY.

The Université Populaire is a secular association which has for its objects to extend the higher education among the people and to provide for them centers of instruction and social recreation. The association, which has branches in every city and throughout every province of France, may be said to represent a general movement of the artisan classes for knowledge and social betterment. The rapid spread of the movement is indicated by the increase from 39 branches in 1900 to 138 in 1903. Of the latter, 24 were in Paris, 19 in the suburbs of that city, and 95 in the provinces.

As a result of this organized association, widespread interest has been excited in the scientific developments of the time and also in socialistic theories. The spirit and scope of this work may be inferred from the following topics comprised in a recent programme: Truth, in respect to the question of alcoholism; cooperation of ideas; the universe

(with magic-lantern views); emancipation, discussion; solidarity; fraternity; equality; scientific progress; a chapter on social biology; Voltaire; the rights of women; literature—contemporary poets; justice; charity and misery.[a]

UNSATISFACTORY STATE OF SCHOOL ATTENDANCE.

The elaborate efforts of the Government to maintain and perfect an efficient system of primary schools have not proved entirely successful, judging from the condition of school attendance. There is general complaint from all parts of the country that the compulsory school law is evaded, and this fact is indicated also by the statistics of illiteracy.

As a result of a special inquiry into this matter, recently ordered by the Government, a bill was introduced in the Chamber of Deputies, early in the present year (1907) intended to strengthen the existing provisions of the law respecting compulsory school attendance (law of March 28, 1882, arts. 4, 5).

In the preamble to the pending bill attention is called to the very brief time during which children are under instruction. Nominally this period of obligatory instruction is seven years (ages 6–13); in fact, however, children are admitted to the examination for the certificate of primary studies, which exempts them from farther school attendance, at 11 years of age and even at ten and a half years. The number of children who secure this certificate at this early age constantly increases, and thus a measure which was intended to raise the standard of instruction has resulted, in many instances, in reducing the time during which children are under the restraining influence of teachers and the wholesome companionship of the school.

The preamble to the bill also notes that while from 1882 to 1900 the ratio of illiterates to population declined in a marked degree—for men from 14.6 per cent to 4.3; for women from 22.6 per cent to 6.3—since 1900 the ratios have not changed. The condition of France in this respect is contrasted with that of Switzerland and Germany, where illiteracy has been practically overcome.[b]

In submitting the budget estimates for the coming year, M. Couyba, chairman of the financial committee of the Chamber of Deputies, calls attention to the fact that while the school enrollment increases, the proportion of illiterates remains stationary. Moreover, among the literate are included young people who are only able to read a little, or who can barely make the letters of their names. "Evidently," he says, "the Republic can not be satisfied with this meager result." He urges the reorganization of the local school committees (commissions scolaires), which are specially charged to look

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[a] Maurice Pellison. Les œuvres auxiliares et complémentaires de l'école en France, pp. 49, 170–175.

[b] See Projet de loi sur l'obligation scolaire. Revue internationale de l'enseignement, Vol. LIII, No. 3 (March 15, 1907), pp. 253–256.

after the school attendance of the children of their respective communities and to report violations of the law. These commissions, however, have no actual authority, and hence in the exercise of their duty with respect to delinquent children they simply incur the enmity of the parents. In brief, the compulsory system fails for want of adequate means for the enforcement of the law. M. Couyba urges further that the Government make larger appropriations to the communal funds (caisses des écoles) which are maintained in aid of children who are kept from school by extreme poverty.

SIGNIFICANT LESSONS OF THE SYSTEM.

The lessons of chief importance to other countries to be derived from the study of the French system of primary education relate to the careful gradation of the school programmes,[a] to the inspection service,[b] and to the means of insuring a high degree of efficiency on the part of the teachers.[c]

MEANS OF SECURING EFFICIENCY IN THE TEACHING SERVICE.

Teachers belong to the civil service, and to them is intrusted not only the elementary instruction of the people, but the responsibility of inspiring in them a sentiment of deep devotion to the Republic. Until a very recent date the zeal of the teachers in this great national effort had all the ardor of a religious crusade.

The success achieved by the Republic in less than thirty years (1879 to 1907) in the effort to secure efficient teachers has attracted universal attention to this feature of the school system. The result is due primarily to the provision of local normal schools and to the high standards maintained for them.

In order to prepare professors for the primary normals, the State has maintained two higher normal schools—one at St. Cloud for men, the other at Fontenay-aux-Roses for women—which are really post-graduate institutions, requiring for admission either the higher diploma of pedagogy or the bachelor's degree. Equal care has been taken to secure a select body of students for the primary normal schools. Candidates for admission must be at least 16 years of age, must have finished the course of the higher primary schools, and must also pass the examination for the brevet élémentaire, or teacher's diploma of the lower degree. At the end of the second year of the normal course (formerly at the end of the three-year course) the students are presented for the examination for the brevet supérieure, or teacher's diploma of the higher degree. The third year is given up

[a] See Report of the Commissioner for 1903, Vol. I, pp. 595–619.

[b] See Report of the Commissioner for 1900–1901, Vol. I, pp. 1100–1103.

[c] See Report of the Commissioner for 1902, Vol. I, pp. 710–719; also bibliographical references at the end of this chapter.

entirely to professional training, theoretic and practical.[a] The State bears all the expenses of the training, including the board of the students, who pledge themselves to teach in the schools for a period of ten years.

It is obvious, however, that the 171 normal schools (87 for men, with 4,903 students, and 84 for women, with 4,176 students) could not possibly supply the annual loss in a force of 120,000 teachers. In fact, the normal schools, on an average, graduate less than 1,200 students each year. But these schools really set the standard for all applicants for teachers' positions. No one is appointed who does not pass the examination for the brevet élémentaire, at least, and all appointees must serve two years as probationers (stagiaires) under close inspection. In order to become a certified teacher (titulaire), the aspirant must have had two years' successful experience as a teacher and must possess the certificat d'aptitude pédagogique. This certificate, which has the force of a life tenure, is secured by a severe examination, including, besides the branches taught in the primary schools, at least one foreign language, psychology, educational theory, and practical problems in teaching and school government. The minimum age for this diploma is 21 years. Thus a certain maturity of character and experience, as well as academic attainments, are assured in the case of all full teachers.

The conditions of the service as regards minimum salary, promotion, etc., are regulated by law, and while the French teacher is subject to discipline, he also may receive special rewards in the form of honorable mention, medals, prizes of books or money, conferred upon him with impressive ceremony—all distinctions greatly prized in France. The advantages of the service are increased by the State pension.[b]

Recalling the conditions of the nation when the present Republic entered upon its work and the share which the teachers have borne in its establishment, it is easy to understand that they were for a long time sustained by an artificial stimulus. Now that normal conditions of order and tranquility prevail, the problem of maintaining an adequate and competent teaching force for the primary schools is more nearly identical with the same problem in other countries. A decline in enthusiasm on the part of the teachers was inevitable. The decline in the number of applicants for admission to the normal schools and to the teaching service is due in most part to a cause that operates in all countries, namely, the superior attractions of other careers as regards salary and social advancement. In France the opening of other branches of the civil service—postal telegraph, tax office, etc.—to pupils from the higher primary schools on less rigorous conditions than the teaching service and with better wages has complicated the situa-

[a] Decree of August 15, 1905, reorganizing the normal school programs; the same went into full effect the present year (1907).

[b] For details as to teachers' pensions, see Report of the Commissioner for 1905, Vol. I, p. 67.

tion. That these conditions are fully recognized by the Government is indicated by the recent measures increasing the salaries of teachers and the chances of promotion.[a]

An additional cause of discontent on the part of teachers is undoubtedly found in the spread among them of socialistic doctrines and the consequent increase in official restrictions. The conditions in this respect are illustrated by the recent dismissal of a teacher in a school of Paris, who, as secretary of the Federation of Teachers' Unions, had signed a letter of protest in behalf of trade unions addressed to the premier.

In support of his action in this case Minister Briand declared that there could be no assimilation between labor unions and members of the civil service; and he carefully discriminated between the state of dependence and uncertainty in which workmen subject to the will of a single patron live, and the security of the public functionary whose entire life, including provision for old age, is regulated by the state.

[a] These measures were reviewed in the Commissioner's Report for 1905, Vol. I, pp. 66–67. For convenience of reference the conditions of promotion and the schedule of salaries are here repeated:

The salaries allowed by the State for teachers of elementary primary schools under the new regulations are as follows:

Class.	Male teachers.		Female teachers	
	French currency.	United States currency.	French currency.	United States. currency.
	Francs.		*Francs.*	
Probationers	1,100	$220	1,100	$220
Fifth	1,200	240	1,200	240
Fourth	1,500	300	1,400	280
Third	1,800	360	1,600	320
Second	2,000	400	1,800	360
First	2,200	440	2,000	400

Principals in charge of schools receive additions to the fixed salary of the grade to which they belong, as follows: If in charge of a school of three or four classes, $40 per annum; if more than four classes, $80.

The salaries of teachers of the higher primary schools, which were slightly increased by the financial law of April 22, 1905, are as follows:

	Francs.	Equivalent in United States currency.
Fifth class	2,000	$400
Fourth class	2,300	460
Third class	2,600	520
Second class	2,800	560
First class	3,000	600

For promotion from the fifth to the fourth grade and from the fourth to the third the required term of service is five years; from the third to the second, six years, the candidates being advanced in the order of seniority (laws of March 31 and December 30, 1903).

In addition to the salaries provided by the State, every commune is required by law to provide residence for the head teacher of its public school (in the smaller communes an assistant teacher, if there is one, is generally the wife or sister of the principal), or its money equivalent, and a commune may increase the salary. Outside of the large cities, however, the local increase of salaries is seldom granted without the requirement of other teaching.

It should be added that while this action of the minister was supported by the subsequent vote of the Chamber of Deputies approving, by a majority of 137 in a total of 565 votes, the general policy of the government, it was condemned by the teachers' associations throughout the country, by the civil council of the Department of the Seine, and by many eminent advocates of free institutions.[a]

In addition to the disturbing influences already referred to, there is a growing sense of dissatisfaction with present conditions on account of the separation of the teaching service of primary schools from the higher grades of the profession. The training of the primary normal schools has been extremely formal and wanting in the culture elements and the stimulating companionship of the higher institutions of liberal education. For this reason and from economic considerations, it has been urged that the normal schools should be drawn into organic relations with the lycées and universities; but experience shows that this would be disastrous to the spirit and purpose of the professional training. The new scheme of studies and examination authorized by a decree of August 15, 1905, is intended to raise the standard of professional training and at the same time to provide for a more disinterested general culture. This experiment[b] and the discussions that it has provoked are of interest as indicating that the problem of training teachers and of recruiting the teaching force of the primary schools has not reached final solution in France.

SECONDARY EDUCATION.

SCOPE.

The department of secondary education in the ministry of public instruction[c] comprises two distinct divisions, one including the public secondary schools for boys (lycées and communal or local colleges); the other, the corresponding schools for girls.

STATISTICAL SUMMARY.

The following tables present the principal statistics relative to these institutions for the years specified. In Table IV, pertaining to secondary institutions for boys, private institutions are included.

[a] See criticism by M. F. Buisson, Manuel général, Vol. XLIII, No. 34 (May 25, 1907), pp. 529–530.

[b] See Reform of Elementary Normal Schools in France, by Gabriel Compayré. Educational Review, vol. 32, no. 4 (Nov. 1906).

[c] The present director of secondary education in the ministry is M. Rabier.

TABLE IV.—*Enrollment in secondary schools for boys.*

Classes of institutions.	1876.	1887.[a]	1892.[b]	1897.[b]	1901.[c]	1906.[d]
State schools:						
Lycées	40,995	53,816	52,945	52,427	54,830	57,610
Colleges	38,236	36,086	32,508	32,412	33,372	36,616
Total	79,291	89,902	85,453	84,839	88,202	94,216
Schools of religious associations:						
Classical	46,816	50,085	51,087	62,188	67,872	[e] 20,820
Petits séminaires (preparatory to theological schools)	.....	.....	23,948	22,381	22,328	.....
Total	46,816	50,085	75,035	84,569	90,200	.....
Private secular schools	31,249	20,174	16,306	12,813	9,000	35,049
Total nonstate	78,065	70,259	91,341	97,382	99,260	.....
Grand total	.....	160,161	176,794	182,221	.....	150,095

[a] From Statistique de l'enseignement secondaire des garçons, 1887, pp. lvi, lxxviii, xcviii.
[b] Rapports faits au nom de la commission du budget, etc., Service de l'instruction publique, par M. Bouge, 1897, pp. 124, 125; also 1898, pp. 32, 33.
[c] The same by Maurice-Faure, 1902, pp. 443, 445.
[d] Rapport fait au nom de la commission du budget, etc., 1908 (ministère de l'instruction publique) par M. Steeg, Député.
[e] Schools formerly conducted by religious associations now transferred to secular managers.

TABLE V.—*Enrollment in lycées and colleges for young women at specified dates.*

Year.	Lycées.			Colleges.			Grand total.
	Academic department.	Primary department.	Total.	Academic department.	Primary department.	Total.	
1881	.....	.....	71	.....	.....	229	300
1886	1,713	1,048	2,761	1,218	958	2,206	4,967
1891	2,831	2,132	4,963	1,410	1,272	2,682	7,645
1896	4,266	3,297	7,563	1,653	1,429	3,082	10,645
1906	8,031	6,746	13,242	5,043	3,636	8,679	[a] 21,921

[a] Also 11,694 in secondary courses under public auspices.

The state appropriation for secondary education amounted in 1906 to 21,948,085 francs ($4,391,617); of this amount, 19,463,160 francs ($3,892,632) was allowed to the lycées and colleges for boys, and the remainder, 2,494,925 francs ($498,985), to the public secondary schools for girls.

REFORM OF SECONDARY SCHOOLS FOR BOYS.

CLASSES OF SCHOOLS AFFECTED.

The public secondary schools for boys, as regards their organization, studies, and discipline, constitute a factor in the French scheme of education, and in the forces that mold national life and leadership, without an exact parallel in any other country.

The recent modifications of these schools are of interest for the light they throw upon the tenacity of established customs in France; they have also a lesson of general interest to educators from the evidence they furnish that the overpowering influence of Greek, and even of Latin culture, has been somewhat lessened in its chief center.

The schools specified include: (1) The state lycées numbering 111, of which 19 are in the academy of Paris, 12 being in the city itself, and the remaining 92 distributed among the 17 provincial academies; (2) the communal or municipal colleges, numbering 228, of which 24 are in Paris.

The total number of students registered in the lycées in the school year 1905–6 was 60,211. Of this number, 11,269 were in the lycées of Paris. The internes, or boarding pupils, numbered 18,927; the externes, or day pupils, 41,284. The municipal or communal colleges (established by local authorities, but supported in part by the State) had in 1905 a total of 36,313 students, of whom 13,062 were boarders and 23,251 day scholars. Of the entire number, 16,589 were enrolled in the Paris colleges. By comparison with the population it appears that the number of boys in secondary schools (lycées and colleges) was equivalent, for the year named, to one for every 406 of the population; the number in Paris alone was equivalent to one for every 163 of the population. These ratios show the extent to which the people of France avail themselves of the public provision for liberal education, but they can not be taken as an index to the general demand for such advantages, since, as late as 1905, the schools of the religious orders, which followed practically the same programmes as the lycées, enrolled more students than the State lycées and the local colleges.

The lycées, which are the typical schools of secondary education in France, are State institutions, established and supported by the Government with the cooperation of the cities in which they are located. They receive both boarding and day students (internes and externes), the cost of tuition and board, like all other details pertaining to their management, being regulated by orders from the ministry of public instruction. The communal colleges follow so far as circumstances permit the same programmes of study, and their principals and professors like those of the lycées are appointed by the minister of public instruction. The domestic affairs of the colleges are regulated by the local civil authorities or other local directors in charge of the institutions.

The reform of secondary education, which has occupied the attention of every Government since the fall of the first Empire, has been directed in particular to the lycées, although the communal colleges have been included in the measures adopted, so far as these are affected by conditions common to the two classes of institutions.

THE RIBOT COMMISSION AND THE CONDITIONS WHICH CONFRONTED IT.

The latest effort at a reform of secondary education dates from the appointment of a Parliamentary commission in 1898, to investigate the existing conditions and advise as to practical measures for their

improvement. The commission [a] was composed of men of distinction in public life, who called before them eminent representatives of secondary education, both public and private, so that the problem was thoroughly discussed in every phase and from every point of view.

The experience of repeated attempts at reforming the lycées as regards both the domestic and scholastic divisions had shown the uselessness of sweeping proposals. On the scholastic side, the lycées embody ideals and purposes enduring through centuries; the domestic régime is of more modern origin; it was ordered by Napoleon in 1804, and has the inflexible permanency of all his administrative creations. They yield only to the subtle power of a new indwelling spirit. This was plainly perceived by Jules Simon, who, during his brief term of service as minister of public instruction (1870–1873), outlined the required administrative reforms which, adopted piece by piece, are gradually changing the form and spirit of both secondary and higher education in France.

In a circular letter addressed to the principals (proviseurs) of the lycées under date of September 27, 1872, this minister said:

> Many persons urge me to make great reforms in the university all at once. I resist their demands and my own desires, because in this matter it is only possible to advance by successive ameliorations. Here, in particular, it is necessary to proceed with a firm step and to avoid mere experiments. Young people will see changes enough in the world; accustom them, at least during their early years, to love the enduring. I should wish, moreover, if this were possible, that every reform demanded of me should emanate from those who have passed their lives in considering and practicing the work of instruction; that it should arise from common experiences instead of being imposed by a single will. It is well known that I can not modify the programmes by my own authority, and that the supreme council alone is competent to do this. We must, then, be satisfied to move slowly, to strengthen the essential parts of the establishments under our control, and to improve them little by little; it is necessary to renounce the glory of transforming them at a single stroke.[b]

Although the commission over which M. Ribot presided was free from the official restraints to which Minister Simon refers in the passage above quoted, their deliberations were marked by a perfect understanding of the conditions that still make it impracticable to attempt sweeping changes in the organization of secondary education in France.

In his introduction to the report of the commission, M. Ribot notes briefly the conditions of this problem common to all countries—the conflict between the classics and modern studies, the vast extension of scientific knowledge, with the consequent overcrowding of programmes, and the multiplication of liberal professions, with a corresponding increase in the courses of preparatory study.

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[a] For the full composition of the commission, which was under the presidency of M. Alexandre Ribot, deputy and publicist, see Documents parlementaires, Chambre. Annexe, May 23, 1899, no. 866. The same document contains a full report of the hearing before the commission.

[b] Statistique de l'enseignement secondaire, 1876, p. 412.

The crisis [he continues] is not then limited to our own country. But it is complicated in France with the ever-present contest between public and private instruction. This contest shows here a character seen nowhere else save in Belgium. Liberty of teaching has ended in France with a monopoly divided between the State and the Catholic Church. Individual initiative is crushed. We do not have all the benefits of liberty, but we do have all the inconvenieces, not to say perils, of liberty.

The question of the internat (boarding department) has become a source of embarrassment to the State, which does not exist elsewhere, at least not in the same degree. The questions of the baccalaureate, of university degrees, of competitive examinations for admission to the schools [higher special schools] are discussed among us even more earnestly than our social organization; our love of public functions, and the dispensations that military law accords for certain diplomas, create a vivid sense of the inconvenience and artificial character of all these modes of selection.

It is necessary to add that we can not approach the problems that relate to education without a certain disquietude due to more general causes. It is not education alone that is passing through a crisis in France. We suffer from contradictions which exist between our social state and our political state, between the habits of mind which connect us with the past and the pressing need we feel of adapting ourselves to a new existence, between our national aspirations and the conditions of equilibrium which are being established in the world, as a result of changes effected in the distribution of forces and the development of populations. These uncertainties and contradictions have obscured in the souls of our youth the ideal which was the light of former generations. We feel that a great effort is necessary to put us in accord with ourselves, to preserve our standing, and to maintain our economic superiority.[a]

The report of the Ribot commission covered the several phases of the problem indicated in the passage above quoted, but the recommendations that it contained were limited to evils in the lycée administration that could be separately considered. For an understanding of the remedial measures to which these recommendations have led, it is necessary to have in mind the characteristic features of the lycée organization. These are as follows:

CHARACTERISTIC FEATURES OF THE LYCÉE ORGANIZATION.

The separate conduct of household and scholastic divisions (internat and externat), the professors being nonresident and the students in charge of the proviseur, the censeur d'études, and a class of resident tutors termed répétiteurs, appointed generally in the proportion of one to about thirty students.

The want of independent resources, all expenses being met by a State appropriation administered by an official of the treasury department, in accordance with the financial report drawn up by the économe (steward) of the lycée and forwarded by the academic rector. [Prior to the recent administrative reforms receipts from tuition fees, board, etc., were turned over to the treasury agent.]

The appointment of all the house officials and employees, as well as the corps of professors, independently of the proviseur.

The regulation of the affairs of the boarding department by orders issued from the central authority.

The maintenance of rigid discipline and strict routine, boarding pupils being under surveillance night and day, and the half boarders (demi-pensionnaires) subjected to the same rules as full boarders during the school day.

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[a] La Réforme de l'enseignement secondaire, Alexandre Ribot, Député, président de la commission d'enseignement, pp. 5–6.

On the scholastic side, a complete system of general education, practically uniform for all lycées, arranged for a period of seven years (i. e., from the eleventh to the eighteenth year of age), following a preparatory course of three to five years.

An official sanction, the baccalauréat, obtained by examination at the end of the course, and which is the indispensable requisite for admission to university studies or to official life.

CHANGES IN THE INTERNAL CONDUCT OF THE LYCÉES.

As regards the internat, the recent reform measures relate to the budget and to the position and attributes of the proviseurs and the répétiteurs.

The new financial regulations provide that the annual appropriations by the State for the lycées shall be a fixed amount for a period of five years and shall be applied exclusively to the expenses of the externat. The receipts of the internat are henceforth to be carried on an independent account, and the proviseur is given a voice in the disposition of the same.[a]

According to all opinion, the increase of the authority and dignity of the proviseurs was the matter of first importance in the proposed reform of the lycées. "The proviseur," says M. Ribot, "is the chief of the establishment; the law of the Year X (1799) so declared. In point of fact, his authority has been diminished more and more by the course of the administration in taking upon itself the regulation of even the smallest details. * * * It is above all things essential to restore to him the attributes of authority which belong to the head of an establishment." In accordance with this opinion, the decree of May 31, 1902, not only gave the proviseur some control of the house income, but also authorized him to appoint all the house officials and persons employed in the service of the institution whose appointment is not otherwise provided for by law. He becomes, thus far, chief in authority as well as in name.

The most serious criticisms of the internal conduct of the lycées have long been directed to the position and duties of the répétiteurs, or maîtres d'études, who from their title would seem to be tutors charged with the important duty of helping students in the preparation of their lessons and of enforcing the instruction given by the professors; in fact, the répétiteurs have been merely supervisors, keeping constant watch over the groups of students assigned to them. As their authority was limited to reporting infringement of rules, the service naturally degenerated into a system of espionage. The evil was recognized by Minister Simon, and has been the subject of continual agitation and of repeated efforts at reform from the days of his administration, which closed in 1873, to the present time. No

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[a] Decree of the President of the Republic of July 20, 1901, and circular letter of the minister of public instruction of same date. Bulletin administratif, Vol. LXX, no. 1480 (Aug. 10, 1901), pp. 323–333.

Decree of May 31, 1902, relative to the financial administration of the lycées. Bulletin administratif, Vol. LXXI, no. 1522 (June 7, 1902), pp. 726–731.

radical change, however, was made in the status of the répétiteurs until after the Ribot commission had completed its work. By decrees since issued, the financial condition of the répétiteurs has been improved. They have been relieved of the charge of students outside of study and recreation hours and have been admitted to teaching functions under the direction of the proviseurs. In other words, they have been made a class of adjunct professors, assistant to the proviseurs themselves. At the same time the supervision of the students at table and in the dormitories has been transferred to a new class of assistants, termed surveillants, who are appointed by the proviseurs.[a]

It will be readily understood that the final purpose of these reform measures is to infuse a new spirit into the lycées. They reflect the convictions of statesmen and educators formed from full knowledge of the life and methods of these institutions and of the more stimulating system of the great endowed schools of England. The latter are also boarding schools, organized, like the lycées, with a view to the education of the whole being by a carefully planned direction of the entire life of the students during the formative period. The difference between the two systems is graphically depicted by M. Max Leclerc, who, in 1889, was charged with the mission of examining the means employed in England for "instructing and forming the higher and middle classes, from whom politics draws its parliamentarians and its diplomats, the administration its functionaries, the army and the marine their officers, industry its expert directors, commerce its agents, philosophy profound thinkers, literature, history, science, men of original talent." [b] In the book which embodies the results of his inquiry, M. Leclerc deplores the stagnation and artificial routine of the lycées as contrasted with the free life and manly discipline of the English schools. "In the place," he says, "of forming citizens prepared for liberty, men capable of self-direction, characters firm and upright, having a horror of deceit and a taste for action, we make rebels or beings without will. * * * Can there be any wholesome moral influence, any education of character, if there is a complete separation between the professor who teaches and the master who supervises, between the lessons in science and the counsels which ought to be the rule of life? In short, should not those who develop the mind have also some part in forming the character? This is, indeed, one single task which must be confided to the same hands if it is to be accomplished." "This truth," adds the writer, "the English have comprehended; hence they have

[a] Decrees of November 18, 1901; December 24, 1901; May 31, 1902; September 1, 1904; law of February 24, 1902, and circular letter of the minister of public instruction of August 7, 1905. For text of the decrees and circular, see Bulletin administratif for the years referred to; also Code de l'enseignement secondaire, A. Wissemans, published by Hachette & Co., 1906.

[b] L'Éducation des classes moyennes et dirigeantes en Angleterre, par Max Leclerc, p. v.

succeeded where all others have failed." [a] The influence of the English system is seen in the effort to free the lycées from slavish dependence upon official regulations, and to give the proviseur a measure of authority. Complete autonomy, such as head masters in England possess, is incompatible with the organic unity of the State system of Education in France.

REFORMS IN THE SCHEME OF SECONDARY STUDIES.

The changes in the internal conduct of the lycées here considered are of interest chiefly for the light they throw upon conditions peculiar to France, but the reforms in the scheme of secondary studies involve principles of recognized importance wherever problems of secondary education are discussed. The new programmes, authorized by a decree of May 31, 1902,[b] have been fully explained in a previous report of this series.[c] The general outline of the scheme is here repeated to assist in the understanding of certain particulars as to its practical workings brought out in the latest report on the subject.

The new scheme of secondary studies comprises two cycles, one of four years' duration, the other of three. The first cycle extends over four years, the classes retaining their old names, sixième, cinquième, quatrième, and troisième. Upon the completion of troisième, students must submit to an examination which entitles those who pass it successfully to a certificate of secondary studies.

The second cycle is divided into three classes, the seconde, the première, and the class of philosophy and mathematics. At the end of this cycle, students present themselves before the examining body, which confers upon successful candidates the bachelor's degree.

The special importance of the division into cycles is the opportunity it offers for young men who must enter upon business life at fifteen or sixteen years of age to acquire a fund of definite knowledge under the stimulating guidance of competent professors, and to obtain a University certificate of recognized value.

A second change effected by the new programmes is the grouping of the studies in sections after the manner of parallel or equivalent courses in our own colleges. Only two sections are comprised in the first cycle, section A, in which Latin is a required study throughout the four years, and Greek optional for quatrième and troisième, and section B, in which neither Latin nor Greek is taught, the time thus gained being given to French, the sciences, and drawing. Pupils from the higher primary schools can enter this section, which thus, in theory at least, provides for the coordination of primary and secondary schools.

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[a] Leclerc, pp. 65–66, 69.

[b] Bulletin administratif, June 7, 1902, pp. 739–858.

[c] Report of the Commissioner of Education, 1902, Vol. I, pp. 687–693.

In the second cycle, four sections or groups of studies are offered to the student, whose choice is determined while he is in troisième—that is, in the highest class of the first cycle. The four sections of the second cycle are as follows: Section A, Latin with Greek; section B, Latin with extensive study of the modern languages; section C, Latin with fuller study of the sciences; section D, modern languages and science.

Only students from section A of the first cycle can enter the first three sections of the second cycle. Section D receives students from the lower section B, and also those from lower A who do not desire to continue the study of Latin. All four sections lead to the bachelor's degree; thus, theoretically, the new regulations have established the equivalence of modern and classical studies. The degree examination, which is severe, is divided into two series separated by a year's interval; the first examination takes place at the end of première.

The new regulations embody the principal recommendations of the Ribot commission, including an important change in the baccalaureate examination. Whereas, formerly the examining board (jury d'examen) was composed entirely of university professors, under the new regulations professors of secondary education must be included in the proportion of three to six or of two to five. This change not only relieves the university professors, in a measure, of a work which drew them from their proper functions, but it also insures that the examination itself shall accord better with the previous work of the candidates.[a]

RESULTS OF THE REFORM MEASURES.

The changes authorized in the administrative system of the lycées have been applied tentatively, beginning with a few of the more progressive lycées and gradually increasing the number. The progress of the work has been noted from time to time in official bulletins and periodicals, but no report on the subject has been issued by the minister of public instruction. The first general review of the situation is given in the report of M. Couyba, chairman of the financial committee of the Chamber of Deputies, budget of 1907,[b] who examined reports from 90 of the 107 lycées to which the new regulations have been applied. The particulars here given respecting the progress and results of the reform measures are compiled from this source.

The proviseurs.—In regard to the effect of the new regulations upon the proviseurs, M. Couyba reports substantially as follows: The chiefs of the establishments, having some knowledge of the

[a] See decree of May 31, 1902, Bulletin administratif, Vol. LXXI, no. 1522 (June 7, 1902), pp. 705–723.

[b] Rapport fait au nom de la commission du budget chargée d'examiner le projet de loi portant fixation du budget général de l'exercice 1907. Ministère de l'instruction publique, des beaux-arts et des cultes. Par M. Couyba, Député.

resources upon which they can depend, and realizing that by economy they can secure a reserve fund, manage much better than formerly. The freedom which they enjoy naturally increases their sense of responsibility, and the interest which they have always shown in the progress of their respective lycées is increased by the consciousness of self-interest. They come before the administrative councils, which have a similar independence, with well-developed plans touching all the matters affecting the welfare of their establishments. The proviseur proposes the creation of new courses of study adapted to local needs, special instruction for backward students, the use of reserved funds for the relief of poor students or the assistance of needy officials, and he takes the initiative in reducing the tuition fees, when circumstances demand it. With respect to the boarding department (internat) he suggests improvements in the food, furnishing, etc., to be met by the balance which remains at his disposition under the new régime.

In brief, "the system of a fixed appropriation for the externat, and of the complete independence of the internat, promises to develop spontaneity in the chiefs and individuality in the establishments." [a]

The new system of supervision.—As regards the répétiteurs, who have charge of the students during specified hours of recreation and study, it appears that on the whole the new regulations tend to insure unity in the work of the students. Under the old system, in order that the répétiteurs should have the three consecutive hours of freedom and one free day in every fortnight allowed them by law, it was often necessary to divide the study hours in a manner detrimental to the students; now this is avoided; the supervision or the charge of students in the same study hall is divided between one répétiteur and one surveillant, permanently assigned to that charge.

The répétiteurs have also been called to take part in the work of instruction, as authorized. Of 27 proviseurs who report under this head, 21 have found the results satisfactory, 4 regard the instruction given by the répétiteurs as passable, and two only as unsatisfactory.[b]

The reports of the general inspectors, according to M. Couyba, agree with those of the proviseurs in respect to the improvement in the spirit and work of the répétiteurs. Relieved from the charge of students at table and in the dormitories, they show greater interest in the supervision during study hours, and are animated by the opportunity of sharing in the work of instruction. They bring, therefore, to the exercise of their duties good humor, a conciliatory spirit, and an enthusiasm which give great promise for the future.

The new class of surveillants.—With respect to the newly created corps of surveillants, the first question that occupied the attention

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[a] Couyba, pp. 89–90. [b] Ibid., pp. 90–91.

of the proviseurs was that of obtaining proper persons for the service; but of 42 chiefs who report under this head, 25 found no difficulty in filling the office, 6 found it comparatively easy to do so, while 11 report great difficulty in this respect. Candidates were obtained chiefly from the répétiteurs of the local colleges.

A second difficulty, not less than the first, arises from the inexperience and youth of the men appointed to the service. In 12 establishments this proved a very serious difficulty; on the other hand, in 49 the results have been very satisfactory.

As regards the relation between the administration and their subordinates, the new régime [says M. Couyba] has decided advantage over the old organization. The influence of the proviseurs is greater; they have at hand assistants who depend only upon them, and who are less sensitive than the former assistants and more adaptable. It appears also that the proviseurs do not abuse the authority which they have over the surveillants; they guide them, form them, and retain them, unless convinced that they are not capable of meeting the requirements of the service.[a]

The new programmes.—The new plan of studies for the lycées authorized by the decree of May 31, 1902, allows in the upper cycle, as has been stated above, choice between four parallel courses of study, in three of which Greek is omitted.

The immediate effect of this experiment, as noted in a previous report of this series,[b] was the very general abandonment of Greek. Statistics cited by M. Couyba show the same tendency. In 1905, only 16 per cent of the lycée students in quatrième, in which class Greek is begun, were in the Greek course. It is further noticeable that, in the upper cycle, the nonclassical section D attracted more students than any other. In seconde, the lowest class of the upper cycle, this section enrolled 44.5 per cent of all the students in the class, and in première 36.5 per cent. The full distribution of the students at the close of 1905, in the sections of both cycles from class sixième to class première, inclusive, is shown in the following summary. It will be observed that the class of philosophy and mathematics, which completes the lycée course, is not included in the presentation.

TABLE VI.—*Number of students in the different sections of the second and first cycles in the national lycées for boys, November 5, 1905.*

Location.	Second cycle.							
	Première.				Seconde.			
	A	B	C	D	A	B	C	D
Academy of Paris:								
City	196	255	370	249	121	214	391	311
Departments	40	50	87	105	31	42	79	112
Provincial academies	584	862	1,127	1,708	321	797	918	1,917
Total	820	1,167	1,584	2,062	473	1,053	1,388	2,340
Per cent	14.6	20.7	28.1	36.6	9	20.1	24.4	44.5

[a] Couyba, p. 92. [b] Report of the Commissioner of Education for 1905, Vol. I, pp. 77–78.

TABLE VI.—*Number of students in the different sections of the second and first cycles in the national lycées for boys, November 5, 1905*—Continued.

Location.	First cycle.									
	Troisième.			Quatrième.			Cinquième.		Sixième.	
	A		B	A		B	A	B	A	B
	With Greek.	Without Greek.		With Greek.	Without Greek.					
Academy of Paris:										
City	274	529	432	283	439	473	768	471	696	422
Departments	38	120	161	52	112	203	141	180	157	173
Provincial academies	562	1,552	2,420	747	1,515	2,710	2,365	2,838	2,593	2,589
Total	874	2,201	3,013	1,082	2,066	3,386	3,274	3,489	3,446	3,184
Per cent	14.4	36.2	49.4	16.6	31.6	51.8	48.4	51.6	52	48

Statistics from the reports of 88 communal colleges show a similar excess of students in the nonclassical section (D) of the upper cycle, viz, in class seconde 53 per cent of all the students, and in class première 41 per cent.

The tendency of students to select the section limited to scientific studies and modern languages arises, in part, doubtless from the growing importance of these studies in their application to modern industries, but it is due in some measure to the fact that students of section B, lower cycle, are only admitted to section D in the upper cycle, whatever may have been discovered with respect to their natural aptitudes. Experience has shown the force of objections to the present plan offered when it was under discussion. On this point M. Couyba says:

> There is a want of equilibrium in the second cycle; on one side there are three sections with Latin (A, B, C); on the other side, the section without Latin (D). Hence appears the superior advantage of the scholars of the first cycle, Section A, who may enter any one of the four sections of the second cycle (A, B, C, D), while the scholars of the first cycle, section B, must of necessity enter section D. Now this section (D) is strongly, indeed almost exclusively, scientific (three hours a week for French). What must be, and is, the result? The scholars with a natural aptitude for the sciences succeed in section D, but those whose aptitude is for letters make a miserable failure. The reports show that such a scholar, standing even first in French, has failed in the baccalaureate examination because of his inaptitude for science. The crime of this unfortunate child is that of having been entered at 11 years of age in section B of the first cycle. From this fatal day, he is dedicated to scientific culture. At no moment can he turn toward a literary section, for Latin bars the road to A and B, and in D there is no place for any scholar with literary aptitudes.
>
> This defect in the plan of studies for 1902 is manifest. The "scientific humanities" have been created, and this is good for the scholars with scientific aptitudes, but it is necessary to create also the "French and modern humanities," for scholars whose talents are for letters. Once again Latin has triumphed over French.

To correct this deficiency, M. Couyba urges that there be "two divisions of section D, viz., D letters and D sciences; D letters, with predominance of French and living languages; D sciences, with pre-

dominance of the sciences, so that, after the first cycle, the scholars of section B can choose according to their aptitudes between the two sections."

This question is of interest not only to the pupils in the lycées and colleges, but also to those in the primary schools, and in the lycées and colleges for girls. "In a democracy," says M. Couyba, "it is necessary to preserve continuity between primary and secondary education. It is important also that the education of young women should lead to a literary baccalaureate without Latin. This literary baccalaureate, analagous and equal to that of Latin, Greek, or Latin living languages, would be the sanction of secondary education by means of the French language."

It is further urged by M. Couyba that the opportunity for higher education should not be closed against scholars who have not studied Latin. "It is necessary," he says, "that the continuity of primary and secondary education should be completed by a continuity of secondary and higher education, in such a way that a scholar of section D should not be shut out from the 'licence ès-lettres' (history, philosophy, living languages) by a Latin test." Until the reform of 1902 is carried out in full, it will remain, he says, "imperfect and inconsistent."[a]

The baccalaureate examination.—It has already been explained that students of the lycées must submit to examination at the end of troisième; that is, on the completion of the lower cycle of the course. By reference to the above table it will be seen that there is a decrease of about 16 per cent in the number of students at the end of this period. Presumably this may be taken as the proportion of students who end their studies at this point and expect to enter upon business careers or into the inferior grades of the civil service.

From additional statistics cited by M. Couyba, it appears that the number of students who remain to the end of the full secondary course, but fail to meet the requirements of the final examinations, has reached alarming proportions. Out of 10,500 candidates for the bachelor's degree reported prior to 1906, 4,000 failed in the first part of the examination. The reports for 1906 indicate a continuance of such failures. It has already been explained that the first examination for the baccalaureate takes place at the end of première. In 1906 the enrollment in this class was 5,757, but the number that remained for the last year, i. e., class of philosophy and mathematics, was only 3,621. The loss of 2,136 students, or 37 per cent, indicates, according to M. Couyba, that a large proportion of the students who enter the second cycle of secondary studies are not capable of the work which it requires. In his opinion, this evil can only be remedied by making the examination that takes place at the close of each class

[a] Couyba, pp. 74–75.

(examen de passage) a much more serious test than it is at present. "Any reform of secondary education," he says, "which does not include the principle of selection, and which fails to indicate efficient means for applying it, will have neither pedagogical value nor social value."

The bachelor's degree is not only required for matriculation at a university, but is essential for all young men who aspire to official careers or social recognition. Hence, the overpowering influence of the examination in the minds alike of professors and students. The evils of this excessive regard for a single and more or less transient result are generally recognized, and various propositions have been recently advocated with a view to lessening the strain of the artificial stimulus.

A measure strongly urged by friends of reform looks to the reorganization of the general scheme of secondary and higher education by transferring from the secondary course of study to the university stage certain subjects, as for instance, philosophy and logic, and marking the completion of those studies in the university by the bachelor's degree.

Professor Lanson, of the University of Paris, a close student of educational movements in all countries, advises that the baccalaureate examination be turned over entirely to the professors of secondary education. The most extreme measure proposed, namely, the complete suppression of the baccalaureate, has received support from Minister Briand himself. So far, however, the agitation of this subject has served only to prove that the present form and relations of the baccalaureate are too firmly established in both custom and sentiment for radical change.

Undoubtedly, however, this feature of the system will be considered by the extra-parliamentary commission recently appointed by the minister of public instruction, in accordance with a resolution of the Chamber of Deputies, to revise the salary schedules and the rules governing the professional relations of the teaching personnel of the secondary schools.

As a result of the examinations in 1904–5, the jury conferred the bachelor's degree in classics upon 3,592 candidates (2,872 letters-philosophy, 720 letters-mathematics); 1,467 in the section of Latin and modern sciences (608 letters-philosophy, 108 Latin and sciences, 751 letters-mathematics); and 2,567 bachelors in secondary instruction without Latin or Greek (1,618 philosophy, 949 mathematics). The difficulty of the examinations may be inferred from the fact that nearly 60 per cent of the candidates failed in the first part, and consequently were not admitted to the second.

STATE PROVISION OF SECONDARY SCHOOLS FOR GIRLS.

The law providing for the establishment of public secondary schools for girls, called from its author the Camille Sée law, was passed December 21, 1880, against pronounced opposition. A member of the Chamber of Deputies appealed to his colleagues to save France from the ridicule that this law would excite in all neighboring countries, and it was declared in the Senate to be an "attack upon liberty and religion." It was, however, carried by a large vote in spite of these denunciations. The year following, and against even more intense opposition, the normal school at Sèvres was created to prepare professors for the new institutions (law of July 26, 1881).

The twenty-fifth anniversary of these two events was celebrated May 18 of the present year with imposing ceremonies at the Trocadero. The minister of public instruction presided, and the highest officials of the department, including M. Rabier, director of secondary education, M. Liard, vice-rector of the Academy of Paris, and M. Lavisse, director of the higher normal school, together with senators, members of the chamber, and other officials, took part in paying honor to M. Sée, in the presence of the professors and directors of the institutions and the students, past and present, with their parents, who filled the vast hall.

In response to the congratulatory addresses M. Sée reviewed briefly the work achieved. "Secondary education for girls," he said, "comprises the normal school at Sèvres, 47 lycées, 56 colleges, and 3 new lycées just on the eve of completion at Paris. The number of boarding annexes is 28 pertaining to lycées and 49 to colleges. The establishments enroll more than 25,000 students, of whom two-thirds are in the State lycées, 113 directresses, and a teaching personnel of 1,936 women, of whom 295 are professors having the title of agrégée (indicating special proficiency in a particular department of study), and 324 have the certificat d'aptitude. There are also 25 secondary courses for girls under public auspices." He added with natural pride, "Here, in exact figures, is the response to the ominous prophecies of 1880."[a]

The lycées and colleges for young women were not intended to duplicate the course of instruction which tradition and custom had sanctioned for young men. A distinctive programme was formulated for the new institutions, from which Latin and Greek are omitted, mathematics appears in a limited form, and philosophy is represented by elementary notions of ethics. The distinctive studies of the secondary curriculum for boys are replaced in the lycées for girls by modern languages and literature, which are taught in a serious and critical manner. Large place is given also to history, particularly to the history of civilization, to art studies, and to domestic and hygienic science.

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[a] See L'Enseignement secondaire des jeunes filles, June 15, 1907, p. 243.

The Normal School at Sèvres may be regarded, by reason both of the severity of its studies and the quality of its professors, as an annex of the Paris University. In the roll of its teaching personnel are found the names of Darmesteter for letters, Joly and Marion for psychology, Poincaré for physics. The entire teaching corps, men and women, the latter forming a small minority, are university graduates, which term implies a diploma above the bachelor's degree.

DEPARTMENT OF HIGHER EDUCATION.

The highest institutions in the system of public instruction are the State universities and special literary and scientific schools comprised in the department of higher education.[a] The special schools referred to are all situated in Paris, and, though quite distinct from the University of Paris, are nevertheless closely bound to it by historic associations and by the common interests and close sympathies of the professors. These schools share with the university the distinction which has made Paris one of the chief scholastic centers of the world, and the controlling influence in the intellectual life of the French nation.

Tables VII and VIII pertain to the universities, showing the number of students at the specified dates, their distribution among the different university centers, and also their distribution by faculties.

TABLE VII.—*Distribution of students in State universities.*

Designation of university.	Faculties, 1887–88.		Universities, 1897–98.		1900.	1901.[e]	1905.[f]	1906–7.[g]
	Number of students.[b]	Income.[b]	Number of students.[c]	Income.[c]	Number of students.[d]	Number of students.	Number of students.	Number of students.
Paris	9,140	$685,284	12,131	$1,005,538	12,192	12,289	13,431	15,789
Aix Marseille	433	94,261	849	129,983	772	950	1,150	1,269
Besançon	130	43,797	197	54,026	237	252	321	325
Bordeaux	1,029	142,064	2,144	219,656	2,124	2,119	2,433	2,496
Caen	531	101,556	772	130,687	609	646	748	814
Clermont	96	45,492	257	53,027	279	299	272	281
Dijon	236	69,897	604	91,002	649	699	902	966
Grenoble	318	65,431	476	86,192	558	566	769	896
Lille	810	138,357	1,425	195,057	1,141	1,110	1,190	1,560
Lyon	962	175,640	2,335	250,940	2,465	2,458	2,551	2,783
Montpellier	890	156,110	1,496	188,960	1,531	1,610	1,779	1,752
Nancy	454	158,255	1,001	197,377	1,064	1,027	1,540	1,841
Poitiers	391	82,310	944	111,710	752	821	888	962
Rennes	659	114,345	1,503	161,992	1,135	1,139	1,257	1,498
Toulouse	1,303	120,618	1,885	181,450	2,002	2,040	2,304	2,675
Schools of medicine not included in the universities[h]	.....	.....	.....	.....	1,005	1,025	1,745	2,290
Alger[i]	223	98,623	763	112,329	862	881	338	
Total	17,605	2,294,640	28,782	3,172,546	29,377	29,931	33,618	38,197

[a] The present director of this department is M. Bayet.
[b] Statistique de l'enseignement supérieur, 1878–1888, pp. 133–418.
[c] Statistique de l'enseignement supérieur, 1900, pp. 10–180.
[d] Rapport portant fixation du budget général, ministère de l'instruction publique, 1901 (Perreau), pp. 15, 16.
[e] The same (by Maurice-Faure) for 1902.
[f] Annuaire statistique, 1905, p. 65.
[g] Revue internationale de l'enseignement, April 15, 1907, p. 332.
[h] Located at Angers, Limoges, Nantes, Rouen, and Tours.
[i] Has faculties of law, of science, and of letters, and a school of medicine.

TABLE VIII.—*Distribution of university students in the different faculties.*

Faculties.	Number of university students.					
	Jan. 15, 1900.		Jan. 15, 1901.		Jan. 15, 1905.	Jan. 15, 1907.
	State universities.	Independent universities.	State universities.	Independent universities.	State universities.	State universities.
Law	9,709	1,109	10,152	996	12,528	15,551
Medicine	8,781	151	8,627	139	[a] 8,338	[b] 8,852
Sciences	3,857	185	3,910	158	5,152	6,349
Letters	3,476	168	3,723	181	4,519	5,710
Pharmacy	3,395	16	3,347	14	2,980	1,735
Protestant theology	159	.....	142	.....	101	.....
Total	29,377	1,629	29,901	1,488	[c] 33,618	[d] 38,197

[a] Includes 2,407 in the preparatory schools of medicine and pharmacy.
[b] Includes 2,253 in the schools of medicine and pharmacy.
[c] Includes 2,450 foreigners, including 740 women. Total number of women, 1,922.
[d] Includes 3,434 foreigners, of whom 1,195 were women. Total number of women, 2,259.

The following special schools of university rank are also under the minister of public instruction:

Collège de France (appropriation, statistics for 1906, $109,500); Museum of Natural History (appropriation, $202,450); Practical School of High Studies [École Pratique des Hautes Études] (State appropriation, $64,600; city, $7,200); School of Archives [École Nationale des Chartes] (students, 69; appropriation, $14,400); School of Oriental Languages (students, 415; appropriation, $33,000); French School of Archæology at Rome (appropriation, $14,400); French School at Athens (appropriation, $23,540); École Nationale des Beaux-Arts (students, 2,000; appropriation, $84,052). The remaining special schools, such as the Conservatoire des Arts et Métiers, École Nationale Supérieure des Mines, etc., are under the charge of other ministers (see Tables IX and X).

The total income of the universities and faculties has not been officially reported since 1897–98; the State appropriation for their use amounted in 1906 to 13,590,930 francs ($2,718,186). The estimated appropriation for 1907 was 13,834,190 francs ($2,766,838). The entire State appropriation for higher education in 1906, including universities, higher schools, government libraries, observatories, scientific societies, and funds for the encouragement of research, amounted to 20,066,560 francs ($4,013,312). The corresponding amount requested for 1907 is 20,275,110 francs ($4,055,022).[a]

The specialized courses of the universities lead to the degrees of bachelor, of licentiate, and of doctor; the title of agrégé [indicating a high degree of attainment in some special branch], required for the professors of secondary instruction, and obtained by competitive examination; and also the special certificates required for semiprofessional careers.

[a] Report of M. Couyba, pp. 220–225.

The number of diplomas conferred in 1904–5 was as follows: In law, 276 certificates of capacity, 1,615 diplomas of bachelor, 1,587 of licentiate, 473 of doctor; in medicine, 1,083 of doctor, and 357 midwife certificates; in pharmacy, 601 diplomas and 127 herbalist licenses (brevets); in sciences, 282 diplomas of licentiate (licencié), 42 of doctor, and 1,130 other certificates; in letters, 453 licentiate, and 26 of doctor.

These are State degrees, which are conferred upon the candidates who successfully pass the respective examinations. The latter are conducted by examining boards composed of university professors, assigned to that office by the minister of public instruction.

In accordance with the law of March, 1880, relative to the liberty of higher education, these degrees can not be conferred by other authorities; hence the official programme of the examinations virtually regulates the course of study in the independent universities as well as in the State universities.

THE STATE UNIVERSITIES.

DEVELOPMENT.

The State universities, at present fifteen in number, have been constituted under the law of July 10, 1896, which provided for the transformation of the groups of State faculties into organized universities. The faculties, which were a feature of the Imperial University, comprised five orders: Law, medicine, theology, letters, and sciences. Their chief functions, down to the time of the third Republic, were those of examining candidates for degrees, and conferring the same with due ceremony upon the successful aspirants. Preparation for the degree examinations was made in special schools, or, in the case of degrees in science and letters, in the lycées. After the fall of Napoleon measures were taken to restore to the faculties those teaching functions that had spread the renown of the old universities of France to every country of Europe. As a result of this effort, there was developed a new ideal of a university professor, which found its highest realization in the University of Paris. "At this epoch," says M. Liard, "our superior instruction, deprived of institutions which would have given it a form adequate to its functions, took on another form that has become its chief glory. * * * Sustained and inspired by the spirit of liberty, instruction at the Sorbonne became all at once, with Guizot, Cousin, and Villemain, an extraordinary manifestation of the French genius. To this initiative, to the influence of these models, is due the origin and the persistence of the ideal of a professor of the French faculties."[a]

The university lectures were for the most part delivered before mixed audiences of hearers and students. The necessity of giving

[a] Universités et facultés, par M. Liard, p. 9.

instruction of a more formal, thorough, and systematic character was soon recognized, and an attempt was made in 1823 to supply this need by a reorganization of the Paris Faculty of Medicine. Twenty-three full or titular professors and thirty-six special professors (agrégés) made up the new body. In 1840, upon the advice of Minister Cousin, Louis Philippe authorized similar reforms in the faculties of law, of letters, and of science. In the report which led to the creation of supplementary courses in the law faculties, M. Cousin said:

> The agrégés of the school of medicine are a class of professors, young and full of zeal, who represent progress and the spirit of innovation in the school, with, however sufficient guarantees, as the titular professors represent, it may be said, the conservative spirit in science, the maintenance of traditional knowledge, and the authority of doctrines confirmed by experience.[a]

Through the success of Cousin's propositions a veritable teaching force was introduced into the faculties.

The purpose of increasing and strengthening the teaching force of higher education has been steadily pursued by the present Republic, and this effort has made evident the need of those auxiliary aids, libraries, laboratories, appropriate buildings, etc., which through the increase of knowledge have become indispensable aids to education; the effort has disclosed also the fatal defect of a system of specialized higher education without organic relations between its different parts, and the weakness of local universities depending entirely upon the central government, and thus deprived of all the resources and enthusiasm which local self-interest and local pride supply wherever they are allowed free exercise.

These defects and the means of correcting them were set forth by Jules Ferry in a circular letter addressed to the rector of the academies in 1883:

> We should achieve great results [he said], if it were possible for us to constitute universities comprising, in intimate relation, the most varied departments of knowledge, managing their own affairs, conscious of their duties and of their importance, and animated each with purposes appropriate to their respective localities, but with due regard to the interests of national unity, rivaling the universities of neighboring countries, and exciting, also, between the great cities in which they are located a spirit of emulation which would react to their own advantage.

The essential conditions of this freer life were provided by successive measures empowering the faculties to hold and manage property, constituting a governing council for each faculty, and creating a general council of each group of faculties to manage their common interests.

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[a] For reports of M. Cousin and the royal decrees, see Recueil des lois et règlements sur l'enseignement supérieur, Vol. I, 1789–1847, pp. 838, 846.

The law of July 10, 1896, conferred the title of university upon the several faculty groups, and gave final sanction to the privileges and powers previously authorized.[a]

GOVERNMENT OF THE UNIVERSITIES.

Each of the fifteen universities is an incorporated body, having a budget of its own, and self-government, under the general supervision of the minister of public instruction and the higher council of education.

The professors are appointed by the President of the Republic from a list of candidates prepared by the university council.

Each faculty has independent control of its separate affairs, elects its own dean and the members of the faculty council, and manages the budget assigned to it.

The university council is composed of the deans of the several faculties of the university and two other delegates from each, and is presided over by the academic rector, who is the virtual chief (president) of the university. This general council considers matters of interest to the entire university, such as the creation of new lectureships or permission to auxiliary lecturers to deliver courses (cours libres), and the distribution of the budget or other financial affairs; passes judgment on cases of discipline, elects the delegates, and votes the addresses sent to foreign universities.

The income of each university is divided into the ordinary income and the extraordinary income. The former comprises the revenues from property and the interest on invested funds, the fees for matriculation, lecture fees, library and laboratory fees, the receipts from university publications, the State appropriations for current expenditures, appropriations by the departments and cities, and all other income of a permanent character. The extraordinary income includes gifts and legacies, loans, appropriations for building or other special purposes, and funds intended to meet temporary demands. Each faculty comprised within a university has its own special budget. The salaries of all professors are paid from the State appropriation according to a fixed schedule. A university may, however, make arrangements for additional service to be paid for out of its own resources. In giving up to the universities the receipts from fees, which were formerly turned over to the State treasury, the legislature decided that they must be applied wholly to objects of immediate advantage to the students, such as the equipment of laboratories, libraries, new buildings, etc. Apart from these specific limitations, the universities have free disposal of their resources.

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[a] See, in particular, decrees of July 25 and December 28, 1885, and February 21, 1890, and law of April 25, 1893. The text of these decrees and of the law of 1896 will be found in full in the Recueil des lois et règlements sur l'enseignement supérieur, by A. de Beauchamp. Published in 5 volumes, covering the period 1789–1898.

STIMULATING EFFECT OF THE NEW RÉGIME.

The régime of independence has given new vigor to university activities throughout the country. Local ambition has been aroused and local resources have contributed to increase the equipment of the universities for scientific researches of special interest to their respective sections. This activity is illustrated by the multiplication of laboratories connected with the universities; by the establishment of a school of industrial chemistry and a school of tannery at Lyon; by the construction and equipment at Nancy of laboratories of physical chemistry and electricity; by the creation of an institute of wine making and grape culture at Dijon, and an institute of industrial physics and a laboratory of agricultural chemistry at Lille, etc.[a]

PRESENT NEED OF FUNDS.

The development indicated has, however, been accomplished under great difficulties; for, notwithstanding the efforts put forth by the Government and the local interest excited, the resources of the universities are far below their requirements. This condition, which is freely admitted, is emphasized by M. Couyba in his report in the budget estimates for 1907. In this relation he says:

> The French Government contributes to higher education, in round numbers, the sum of 16,000,000 francs ($3,200,000). The German states give 10,000,000 francs ($2,000,000) more, without counting the five and one-half millions of personal revenues belonging to the old German universities. If for France we add to the state appropriation: (1) The subventions by departments, municipalities, and private individuals; (2) the fees for matriculation, registration, and laboratories, we have a total of 21,000,000 francs ($4,200,000). In Germany the total reaches 35,500,000 francs ($7,100,000). The difference is considerable. Our neighbors have then the advantage of us in money, and hence superiority in numbers (personnel) and appliances. * * *
>
> From this comparison [he continues] we should draw a lesson, not of disparagement or discouragement, but of energy and liberality. State, departments, municipalities, and individuals should rather be spurred on to emulate each other in contributions for the development and prosperity of our higher education. We should all be resolutely determined that the glory of French science shall neither be lessened nor eclipsed.

The considerations specially urged by M. Couyba for increasing the force and efficiency of the higher institutions are as follows: (1) Closer coordination between the University of Paris and the special schools of higher education in that city; (2) consolidation of courses of study and research to prevent needless waste of funds; (3) more equitable division of funds between the University of Paris and the provincial universities, and between the several faculties.

The efforts of the Government, at the present time, are particularly directed to measures for the development of the medical faculties.

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[a] For detailed accounts of these recent equipments see Reports of the Commissioner, 1900-1901, Vol. I, pp. 1112-1113; 1902, Vol. I, pp. 705-707.

SPECIAL NEEDS OF THE MEDICAL FACULTIES.

The practice of medicine has been radically modified by recent scientific discoveries, and the fact that the State faculties were not keeping pace with the advances of science has long been recognized. In 1892 a commission[a] was appointed to investigate the subject, and as a result of their recommendations the standard of admission to the medical faculties was raised. This was accomplished by creating a special course of instruction in physics, chemistry, and natural science, to which graduates with the bachelor's degree or equivalent attainments were admitted. Since that time the special certificate to which this course leads has been required for admission to medical studies. Measures were also taken in accordance with the report of this early commission to extend and improve the course of professional study, but the results have been unsatisfactory, and a second commission was appointed during the present year to deal with this important matter. As reasons for such an investigation M. Couyba, whose comprehensive report touches every important matter pertaining to the system, urges, in particular, the multiplication and ever-increasing complexity of the sciences involved in the modern practice of medicine, physics, chemistry, anatomy, biology, hygiene, medical law, etc.; the need of more practical or laboratory instruction in the sciences for which provision has recently been made in the faculties of sciences; and the pressing necessity of increased facilities for clinical instruction in the hospitals.

The entire body of physicians in France, as well as professors in the medical faculties, are united in the movement for a radical reform in the official scheme of medical instruction and for a supply of laboratory equipments and clinical facilities that shall bring this order of professional training up to the highest plane of modern requirements. The commission on medical studies was the immediate outcome of a petition addressed to the minister of public instruction in April, 1906, on the part of representatives of the numerous medical associations, students' associations, and various hygienic and other societies engaged in promoting the physical welfare of ordinary people.

Pending the report of this body, several universities, notably Paris, Lille, and Nancy, are rapidly increasing their equipment for medical instruction.

THE ÉCOLE NORMALE SUPÉRIEURE.

The temporary union of the École Normale Supérieure with the University of Paris, authorized by a decree of November 20, 1903, terminates the present year (1907). The experiment has not been entirely satisfactory, and M. Lavisse, the director of the normal school,

[a] For a detailed account of this commission, see Report of the Commissioner of Education for 1892–93, Vol. I, chap. 5, pp. 216–237.

in his report for the current year, advises the complete fusion of the school with the university. The great function of this school has been the preparation of a select body of young men for professorships in the higher classes of the lycées. Its students were selected by rigorous competitive examination, and their expenses for living and tuition were borne by the State. At the end of the course they proceeded to the examination for the diploma of agrégé, which, however, was open also to students from the faculties of letters and sciences. Many of the latter had the benefit of bourses (scholarship funds), secured also by competitive examination. Since the union with the university the portion of the scholarship funds assigned to the University of Paris has been allotted exclusively to students of the normal school. This fact is urged as a reason for merging the school completely into the university, forming therein a seminary or institute of pedagogy.

The proposal excites much opposition, as the graduates of the École Normale Supérieure have included a large proportion of the men who, during the last century, have been most eminent in French letters and science. From one point of view, no gain to the university can compensate for the loss of this institution, the inspiring source of so much distinction and the center of so many cherished associations.

EFFORTS TO INTEREST FOREIGN STUDENTS.

Many measures have been adopted during the last decade looking to the increase of the influence of the French universities in foreign countries. In particular should be mentioned the efforts to interest American students desirous of pursuing their studies in Europe. These efforts led, in 1895, to the formation of the Franco-American committee, whose object is to extend a knowledge of the advantages which France offers to advanced students in various lines of investigation and special study and also to give information as to the conditions upon which students may avail themselves of these facilities.[a]

It was largely as an outcome of this movement that a new diploma, called the university doctorate, was instituted.[b] Unlike the State degrees, which are required for admission to professional careers in France, the new doctorate is purely scientific, and may be obtained by candidates who have not received the French diplomas of bachelier and licencié. The university doctorate confers none of the rights and privileges attached by law and official regulations to the State degrees, but it is of value to foreign students, as it gives the university sanction to the advanced studies which they have pursued and which are specified on the diploma—for example, the Paris University is authorized to confer the doctorates of letters, of sciences, of medicine, and of

[a] For detailed accounts of this committee, see Report of the Commissioner of Education for 1894–95, Vol. I, ch. 8, pp. 305–312; Report for 1895–96, Vol. I, ch. 11, pp. 629–634.

[b] Decree of July 21, 1897.

pharmacy; also, diploma of pharmacy and certificate of French language and literature; the University of Caen, doctorate of law (also diploma of and certificate of higher literary studies; the University of Lyon, doctorates of medicine, pharmacy, sciences, letters (also diplomas of pharmacy, electro-technical studies, agriculture, oratory, pedagogy, French letters).

TECHNICAL AND INDUSTRIAL SCHOOLS.

The following tables pertain to technical and industrial schools not under the minister of public instruction:

TABLE IX.—*Higher technical schools under other ministries than that of public instruction.*

Institutions.	Number of students.	Budget (State appropriation).
		Francs.
École Centrale des Arts et Manufactures, Paris	700	700,000
Conservatoire National des Arts et Métiers, Paris	100	500,000
École des Hautes Études Commerciales, Paris	320	.....
Institut Commercial, Paris	245	.....
Institut National Agronomique, Paris	240	331,800
École Vétérinaire, Alfort	294	440,000
École Nationale d'Agriculture, Grignon	120	.....
École Nationale d'Agriculture, Montpellier	200	.....
École Nationale d'Agriculture, Rennes	118	.....
École Polytechnique, Paris	472	1,300,000
École Supérieure de Guerre	250	.....
École Spéciale Militaire, St. Cyr (ministry of war)	520	.....
École Navale, Brest	100	.....
École Nationale Supérieure des Mines, Paris	161	167,000
École Nationale des Ponts et Chaussées, Paris	118	355,800
École Coloniale, Paris	46	.....

The independent or private school of political sciences (École Libre des Sciences Politiques), Paris, registered 600 students in 1901.

TABLE X.—*National institutions for industrial education.*[a]

Institutions.	Total expenditure.	Appropriations by the State.	Number of professors.	Number of scholars.	Number of scholars aided by full or partial bonuses.	Number of diplomas delivered in 1905.	
						Superior diplomas.	Ordinary diplomas or certificates.
École Nationale d'Arts et Métiers:							
Aix	$94,294	$94,294	24	312	271	63	35
Angers	82,834	83,077	21	286	231	50	39
Chalons	89,755	89,555	25	290	238	50	39
Cluny	73,574	73,574	21	295	262	45	48
Lille	100,784	100,784	23	288	230	43	42
École Nationale d'Horlogerie:							
Besançon	[b] 11,783	600	7	93	14	3	6
Cluses	9,784	9,784	13	150	81	36	6
École Nationale Professionnelle (manual training):							
Armentières	53,737	17,743	26	400	120	.....	28
Nantes	28,877	25,734	42	295	150	12	.....
Vierzon	52,291	54,373	10	355	183	.....	29
Voiron	42,655	19,754	10	277	131	10	27

[a] From Annuaire statistique, vol. 25, 1905, p. 71. [b] 10,982 from the municipality.

There are also 42 practical schools of commerce and industry for boys, with 7,745 pupils, and 8 schools for girls, with 2,022 pupils, which receive appropriations from the State. To these should be added 14 municipal schools of commerce, of which 2 are in Paris, with a total of 1,578 students. These schools receive appropriations from the state, the departments, and the cities in which they are situated.

As in the case of the schools and higher institutions of general education, the public provision of technical and industrial schools is supplemented by a vast number of private agencies engaged in the same work.

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CHAPTER V.

EDUCATION IN CENTRAL EUROPE.

THE NEW PRUSSIAN SCHOOL LAW TO HAVE A FAIR TRIAL.

Since the new law of school support was passed in 1906, by the Prussian Parliament (see Annual Report of the Commissioner of Education of 1906, Chapter III), all the educational agencies of that country, previously so much disturbed, have perceptibly quieted down, owing to a characteristic of the German people, namely, their unquestioning obedience to order and law. A law may be unpopular there, but as a law it is obeyed, and through obedience to it its imperfections are revealed. This is the general attitude regarding the new school law. While formerly the schools and teachers of Prussia were subject to the dictates of the royal minister of public instruction, the entire external condition and the character of the schools have now been determined by a law agreed upon by the conservative forces of the Kingdom, which at that time had the majority in Parliament. The bill before its passage was opposed by the radical elements. Yet, despite the vigorous opposition the bill met with in Parliament, in the press, and in educational meetings, all the elements of the State now seem to unite in their loyalty to the law.

The date on which the new school law is to go into effect is April 1, 1908, but it provides that communities, school districts, private corporations, and seigniorial administrations maintaining schools, wishing to change the old conditions to conform with the provisions of the new law, may do so during the period of transition, i. e., from the passage of the law in 1906 to the date of its going into effect, and the governmental administration will lend all desired aid to that end. It is reported from all quarters of the Kingdom that the adjustment of conditions of former years to the present legal requirements is going on undisturbed and smoothly, as befits law-abiding communities.

SALARIES OF TEACHERS.

One inharmonious note only mars the present concord prevailing in educational circles of Germany. It is the "Brems-Erlass" (literally, order to put on the brakes), so called, because the minister of

public instruction, in cases where cities had petitioned to be allowed to raise the salaries of their teachers over and above the legally required minimum, had frequently refused his sanction to such a step, from motives both legal and, if judged by State interests, prudent or expedient. Large cities, which offer much higher salaries to their teachers than rural communities, inevitably draw ambitious teachers away from the rural school districts, and thus deprive the latter of educational forces which the people are loath to lose. The State government of Prussia, and, as a matter of self-evidence, the governments of all German States, have been most solicitous to have good rural schools, and they do not look with equanimity upon the "flight of teachers to the cities." Hence the action of the minister, who forbade certain cities raising the minimum salaries of young teachers, particularly since the State is obliged to pay nearly one-half of the salaries of elementary school teachers, State and community, or school district, sharing in that expense.

The educational press of Germany carefully records all the cases in which an increase in teachers' salaries, though urgently recommended in view of the general increase in prices of commodities and cost of living, is negatived by ministerial decree. The discussion of such cases occupies a prominent place in the columns of educational journals. This one dissonance in the educational harmony will, however, soon cease, inasmuch as a bill is being prepared by the minister for introduction into the Prussian diet next season, which will regulate teachers' salaries and their other emoluments. All the interested elements of the Kingdom are at work urging that their views be incorporated in the bill. The new Prussian minister of public instruction, Doctor Holle, successor of Dr. Conrad Studt, meets on all sides with sympathy and good will, but he seems opposed to a disproportional salary increase in cities, owing to the inevitable effect such action would have upon the open country.

WOMEN TEACHERS IN GERMANY.

In many cities the present phenomenal commercial and industrial activity has the effect of drawing teachers away from a profession in which there is no prospect of opulence or even moderate wealth, as well as of preventing young men from entering normal schools in order to become teachers. There is, of course, one other way out of the difficulty caused by the lack of teachers—namely, the employment of women—but that is a remedy which can become effective only after several years. The Draconian law of Prussia and other German States is, that no person, whether man or woman, may be employed as teacher, save those who have gone through a

three or four years' course of normal training, or have passed through the philosophical faculty of a university. This prevents the employment of pupil teachers as in England, or of the so-called cadet teachers of the southern European countries.

Hence we have the spectacle of a state which insists upon having thoroughly prepared teachers for its public schools, but which, owing to its own inability to meet the expense, refuses to raise the salaries of teachers, though numerous wealthy and thriving industrial centers are willing to pay larger salaries than the law provides for.

Germany is still at the foot of the list of countries in regard to the proportion of women teachers, as may be seen from the following list:

Sex classification of teachers in various countries.

Country.	Teachers in 1904.		Per cent of women.
	Men.	Women.	
Portugal	2,800	22,000	88.0
England and Wales	26,200	66,300	71.5
Scotland	4,000	7,000	63.6
Italy	18,600	31,800	63.0
Ireland	6,000	7,000	53.8
France	56,370	49,400	46.7
Finland	1,500	1,170	44.0
Norway	3,852	2,354	38.0
Russia	38,700	22,400	36.6
Switzerland	6,400	3,600	36.0
Sweden	4,922	2,649	35.0
Denmark	4,500	1,800	28.6
Austria	51,500	20,000	28.0
Hungary	26,365	5,938	18.4
Germany	124,027	22,513	15.4

While in America and Great Britain this condition in Germany may be considered abnormal and contrary to sound educational practice, the Germans and Austrians adhere to their conviction that men are preferable as teachers, because they are thought to be better organizers, more logical in thought and action, less given to vagaries and whims than women, and particularly well adapted to make boys practical men and serviceable members of the State. Time will solve this question, as it solves so many others, by results.

THE SPIRIT OF OUR TIME AND ITS INFLUENCE UPON EDUCATION.

The necessity of changing the course of study of the lower schools in Germany begins to loom up on the horizon of the educational world. It is recognized that the course that has been in force some thirty years in Prussia is not quite sufficient to meet the changed conditions of life, since it excludes manual training and confines the activities of the child to intellectual labor. Perhaps no expression will so clearly set forth the arguments in favor of the Germans adopt-

ing a course similar to that in use in the large city schools of America as a few paragraphs compiled from a book entitled "Moderne Erziehung," by J. Tews, of Berlin. His line of thought is as follows:

The problem of education occupies to-day more bright and mediocre minds than ever before, yet despite innumerable discussions, the views in no province of human life are so lacking in clearness, and so varying, as those in that of education. Education is commonly considered an occupation, a kind of "labor," and hence a system of arbitrary measures for which everyone is suited who has acquired the requisite knowledge in schools for that purpose, and who has perfected himself or herself through pedagogical practice. Education, however, is something quite different. Goethe said: "Educated children might be born, if the parents had been educated;" and the proverb has it, "As the old birds sing, so will the young ones twitter." In these two expressions the true essence of education is stated more clearly than in many a learned dissertation.

Education in the widest sense of the term is nothing else than the transmission of the qualities of the older to the growing generation. Education takes place for the most part without our knowledge, even without our will. Youth is educated less by means of conscious, arbitrary, well-calculated measures than by what the educators are, feel, think, say, and do. As the budding tree takes in the sunbeams, as the parched soil of the field absorbs the rain drops, so the child absorbs everything radiating from men and things surrounding him. Upon his way through life there enter his mind great things and small, good and bad, acting as motives propelling him forward or holding him back, and all are transformed according to the individuality of his being. If a boy crossing a street sees a watchman stop a runaway horse, this one act may become an inexhaustible source of courage and resolution in the boy. Thus many good things, but also bad ones, sink into the young soul merely by intercourse with others, by their example. Where actual examples are wanting, where intercourse is circumscribed and meager, thoughts and actions contained in books may replace them. Thus the heroes of long-passed ages may awaken in the boy of to-day courage and willingness to make sacrifices, and the lives of great men may awaken inclinations and powers latent in the child. Likewise the worst may take possession of the child in the same manner. It depends upon the child's individuality whether his actual environment be the stronger, or the world he has built up in his imagination according to impressions gained from books. In both cases, however, it is the same procedure: The influence of examples and of intercourse with other people, be they real or fancied creatures, involuntarily draws the child forward.

Compared with these influences, formal educational measures do not count for much. A child who is blamed for want of promptness, cleanliness, or diligence, will permit these reproofs to influence him only in so far as the living example of the reproving or punishing person is congruent with his educational measures. Otherwise the latter remain without effect, or may have an effect contrary to their intention.

Now what is it that distinguishes the present time, with reference to education from former epochs of civilization? Wherein consist its characteristic features, and in what respect is it more favorable or unfavorable to youth than former periods?

Permit me to begin with the exterior—that is, the economic conditions of life. These form the basis of the intellectual and ethical life. The most noted characteristic of economic life consists in the fact that machine labor, the factory, has replaced the shop; production by wholesale has replaced that of small workshops; the workman who labored with his hands and who knew all the bearings of his trade had to give way to the factory hand, who only knew a few movements to go through at a machine. This has separated the workroom from the living room. Labor has been removed from the field of view of growing youth. It hides itself behind high walls; it is a world in itself, into which the child rarely, if ever, can peep. Mayhap he sees the

raw materials, and perchance the finished products of labor; man at work he no longer sees, and thus one of the strongest educational factors is excluded.

But are we not all, laborers with head or hand, greatest when at work? Do we not exercise the greatest educational influence upon others while at work? Hence the most lamentable educational loss of our time is the removal of labor from the child's sphere of vision. A child seeing adults at work is always in a good school, even though he does not learn to read or write. With his weak hands he begins to imitate the one he sees creating, regardless whether he be a helper in the process of labor or in the world of play. A child who looks into the work place of an adult, and there finds material for his own impulse to work can not remain idle, and through imitation and cooperation his strength increases. Through imitative play he becomes a creative, efficient workman.

Viewed from this point, our time is a period pedagogically poverty-stricken, and whatever measures may be devised in school and shop as substitutes for the full, many-shaped, flowing life which always offers the child something enticing in the line of productive energy, the substitutes will remain inadequate. A child who does not see his father at work, does not know the life value of his dearest guardian and natural educator. Hours of rest at home, festive days, or the life on the street may develop other sides of human life, but never the qualities and powers upon which human culture depends. So it comes that the youth of our day acquire the softer portions of our civilization, but not its supporting bony structure.

To this contribute also the city conditions so hostile to youth. First of all, the freedom of motion is lacking which is so eminently necessary for the child's growth; the muscles and the five senses are deprived of opportunities for development. The child is forced to live a one-sided life of the imagination; his thoughts become colorless; physical strength lessens; the will lacks opportunities for action. In a metropolis a race of easily governable individuals grows up, incapable of great resolutions, lacking the capacity for self sacrifice as much as the determination to sacrifice life and property for a great idea. The inhabitants of large cities are good herding animals. I admit that therein lie implicated great virtues, and a great healthy nation may perhaps tolerate a large percentage of such individuals; but when cities grow in area and population to such an extent as they do at present in Germany, one is prompted to ask whether a sound balance is maintained between active and passive, commanding and subordinate individuals.

To the superficial observer, however, our time appears to contradict this; it is to him an era of educational triumphs. In home and school apparently better facilities are offered for the education of the growing generation than a generation ago. Our German nation has become wealthy since 1870. Even from laborers' cottages want has disappeared. The poor child is sufficiently fed, nay not infrequently overfed, and well dressed. The former unsatisfactory housing has been remarkably improved everywhere in the Empire. Through protective labor laws and increased industrial development the labor day has been shortened. Even the laborer has time now to concern himself about his children's education, and he does it too. Attendance at school is regular; schoolrooms are more airy and brighter than formerly; appliances for learning and teaching are provided more lavishly, and the teachers are all adequately prepared for their profession. School education is now generally appreciated in strata of the population in which, a generation ago, knowledge was considered a mere luxury.

Looking at all these things, one is apt to come to the conclusion that there is no reason for complaint; one even notices fresh, active life and aspirations in the schools. But this is only on the surface; modern school equipments and institutions are mere outer forms within which organized education is taking place. Whatever is offered in these forms, or has found room in them, is much less satisfactory than the forms. It is true we teach more, perhaps also better, than in former times; we have better

teachers, more technical methods, and better appliances for teaching, but in the matter of real education these count for little. Our conception of education and instruction destroys to a large extent our own success.

Our century has been called the century of the child. But adults can not create a paradise for the child. They do much, if with all their pedagogy and care they do not destroy it. The child does not want as much as we give him. He is unassuming; he likes to be himself. In this regard there never was a time harder for the child than the present. The care for children has increased immensely; to nourishment, clothing, and other things we attend plentifully. All productive labor is taken away from the child, and in place of it he is burdened with a much more difficult and oppressive labor, which he can not as yet understand. According to the views of our age the child is to have one duty only, namely, to prepare himself for life. But this duty is to the child unnatural and impossible. The parents of to-day think only of the future of their child, of his provision or maintenance, of the offices and positions which he is to fill in the future, not of his present. During the fairest period of his existence he is not allowed to live his own life.

From this standpoint the entire school education is generally viewed. The parents do not consider that the child must in free movement use his powers and follow his inclinations, so that he may live like a human being in whom inborn talents can freely develop, but they have in view a certain social position to which education is to lead. That is the reason why our entire education has become materialistic, narrow-minded, bureaucratic. Every step aside from the prescribed scholastic pathway, every day of nonattendance at school, is considered an irreparable loss.

Our schools are not elementary schools, not children's schools, but vocational schools from the first school day on. The future calling or profession and little else holds the scepter. And that is the reason why we patiently disregard everything we do not like about the schools. If a school had no other duty save to nurse the child and to nourish and exercise his intellectual and emotional powers, and if the main point were considered to be the kind, direction, and height of the child's development, the parents would at once discover any improper treatment of their offspring.

It can not be said that the teachers should be held responsible for what is being done in our schools. A teacher who would not be willing to follow the expressed will of the parents, to wit, to give preparation for life as they see it—that is, to prepare money-making machines, candidates for offices, etc.—though such a teacher be equipped with the talents and animated with the love of a Pestalozzi he would be considered a useless and incapable educator. The power of coercion of the present conditions of life is so great that the most independent and self-willed personalities in school are repressed and forced to educate and teach as the spirit of the age (this materialistic industrial spirit) demands.

Looking at modern life with critical eye, we can not doubt that strong pillars which supported the education of the young have broken down; that the young generation grows up breathing an atmosphere different from that which surrounded the retiring generation. Being aware of that, we ask: Will this new generation be our heirs and continue our work? Will our race be able to maintain itself against those races who were enabled to develop in a less artificial manner and more in harmony with nature's own unhurried growth? Every cultural development which causes a weakening of natural strength indicates a heavy loss, which is offset by no gain whatever. Everything which oppresses man's individuality, which decreases the ability of his organs to perform work, which diminishes his energy, his resolution, his vital courage, and which shortens his life, is an injurious influence, even though it may appear to the superficial eye as a step forward in civilization.

THE RESULTS OF TWO EXAMINATIONS OF GERMAN PUPILS.

During the last year two events happened in Germany which threw a strong light upon the results of the lower schools. First, Mr. Lauth, of Natal, desirous of testing the results of the schools of London, Berlin, and Paris, sought and obtained permission to submit a set of examination questions to the pupils of the upper grades of the schools of these three cities. The result was satisfactory in none of the three cities. The reason is easily found, if we consider that the methods of teaching in English schools differ very widely from those of German schools, and both differ from those of the French. The Natal examiner followed the English usage of submitting sets of questions in arithmetic, grammar, and possibly geography, which were so fashioned that only one reply to each could be accepted as correct. If pupils were asked: "What seaport is in Alabama?" and should give answers which failed to mention Mobile, some persons might argue that the children were deficient in geography. Of this nature were the questions submitted. If the examiner had asked: "Name the seaports of the East and South of the United States," the pupils might have given answers showing that they were not deficient in the geography of the American coast, though not any of them mentioned Mobile. Hence the manner of questioning employed by the inquirer defeated his purpose. The German children, being chiefly taught by the oral method, and lacking the facility of using pen and ink found among English children, failed, except in branches or subjects where their own intelligence and logically combined knowledge helped them out. Discriminating critics who examined the results of the examination mentioned deprecated the drawing of any definite conclusions from them.

The Berlin teachers, while perhaps unacquainted with the aforestated cause of the apparent failure of elementary pupils in Mr. Lauth's examination, seek to explain why the children in Paris passed this examination with higher averages by stating that every primary school pupil in Paris has a two or three years' course in the maternal school (the French name for prescholastic institutions similar to the German or American kindergarten). In this maternal school the language of the children is improved, they become accustomed to order and other virtues, and though they may not learn the so-called elements of knowledge, they acquire enough of an education to make them most welcome primary pupils, able to progress faster than the German children, who come to the primary school without any preparation, unless it be that given by mothers or older sisters or brothers. These arguments seem the more conclusive if we take into consideration that our experience in this country tends to support the view that pupils coming from kindergartens make

more rapid progress in the primary school, and that throughout their entire school life they show a more receptive mind, more orderly manners, more originality in action, and a better use of language.

To us, who have recognized the valuable service which the kindergarten has rendered to our city children, it is a source of wonderment why the German teaching profession, as well as German State and city governmental authorities, are still so hostile to the kindergarten, and refuse to introduce it as an integral part of the city school systems. The kindergarten is still a private institution everywhere in Germany, and hence the primary school teachers have to undo the effects of six years of slovenly language and careless manners and habits in thought and action of their pupils before they can do efficient scholastic work in language, reading, writing, arithmetic, object lessons, drawing, geography, music, and gymnastics. But a few more of such experiences as Mr. Lauth's publication, the Berlin teachers think, will vindicate the kindergarten, and perhaps make it a part of the public educational agencies of the Empire.

Quite a different and much more important examination of the results of the lower schools took place by order of the Prussian minister of commerce and industry. Complaints had reached him from teachers of continuation, trade, industrial, agricultural, and art schools, namely, that the elementary schools seemed to fail in laying a sufficient foundation for further study. In order to determine whether the complaints were well founded, he submitted a large number of boys who had gone through the lower schools (sixth to the fourteenth year), had sought work in shops, and under the law had been sent by their employers to continuation or night schools. The examination took place in each of the twelve provinces of Prussia.

The results of a reasonable and fair written examination of nearly 5,000 boys, 14 to 15 years old, were quite satisfactory in the western and central—that is, in the industrial—provinces, reaching from 68 to 82 per cent, but not satisfactory in the eastern or agricultural provinces, where many children of alien eastern races have to be assimilated. The results in per cents in the twelve provinces of the Kingdom are as follows:

	Per cent.
Brandenburg (including Berlin, Charlottenburg, Potsdam, Brandenburg, Frankfurt a. O)	82
Hesse-Nassau (including Frankfurt a. M., Wiesbaden, Cassel, Hanau, Fulda, Marburg)	75
Saxony (including Magdeburg, Halle, Halberstadt, Mühlhausen, Torgau, Wittenberg)	75
Rhineland (including Cologne, Düsseldorf, Duisburg, Essen, Elberfeld, Barmen, Bonn, Coblenz, Treves, Aix-la-Chapelle, Crefeld, Saarbrück, Gladbach, Solingen)	71
Westphalia (including Dortmund, Hagen, Hamm, Münster, Bielefeld, Minden, Arnsberg, Soest)	70

	Per cent.
Schleswig-Holstein (including Kiel, Altona, Flensburg)	68
Silesia (including Breslau, Görlitz, Glogau, Oppeln, Liegnitz, Gleiwitz)	67
East Prussia (including Konigsberg, Tilsit, Memel)	61
Hanover (including Hanover, Osnabrück, Hildesheim, Göttingen)	57
West Prussia (including Danzig, Elbing, Thorn, Graudenz)	47
Posen (including Posen, Bromberg)	46
Pomerania (including Stettin, Greifswald, Stralsund, Stolp)	43

If we consider that the examination was for boys who had left school some months or even years previously, to enter upon wage-earning work, and who were drawn into night schools by the compulsory attendance act, we do not think the results of the examination deplorable. If we further remember the disinclination of European agriculturists to regular school attendance, for every fair day has to be utilized for farm labor by all of the family who can perform it; if we lastly consider that German school children, in consequence of the almost exclusive use of the oral method by their teachers, are not so skillful in the use of the pen as children of other nations are, the final decision of an impartial judge can but be favorable. But as the press, not only of the Kingdom of Prussia but of the entire Empire, agrees in saying, the examination proves that the exclusively oral method of German teachers must be supplemented by more written work on the part of the pupils, so that the knowledge gained in lessons may be better secured. To most German teachers this examination has been a revelation, and the educational press proves that the lesson thus learned will not be useless or easily forgotten.

A student of national school systems will find much information on this point in a little book written by Dr. Franz Kuypers, a man who has seen foreign schools, and is, withal, prompted by the kindliest feelings and sympathy. The work is entitled Volksschule und Lehrerbildung der Vereinigten Staaten (Leipzig, Teubner, 1907).

IS THE SCHOOL RESPONSIBLE FOR JUVENILE CRIMINALITY?

The noticeable increase in juvenile criminality in all the countries of Europe and America, and the fact, proved by the Imperial German Statistical Bureau, that the increase of juvenile criminality in Germany is out of all proportion to the increase of criminality in general, have caused much discussion of criminality, especially in periodicals devoted to intellectually and morally abnormal children, and sometimes the schools come in for a large share of blame as indirect causes of criminality. The Pädagogische Zeitung of Berlin meets such arguments by saying:

He who attributes to the school part of the guilt in producing want of obedience to authority and juvenile criminality seems to be lacking in a social sense of duty. The school of to-day is only one of the factors in the education of the child, and not even the

decisive one, not to speak of hidden coeducators who influence the young after they have left school. Nevertheless, it must be admitted that the school may be an accomplice, if it is conducted by a poorly paid, disregarded, embittered teacher; if the school is an overcrowded one, in which only duties are heaped upon the teacher, and where his work is not appreciated, while cruel punishment of pupils is a self-evident consequence of the morose disposition of the teacher; if the school, being the institution of the local authorities who want nothing more, dispenses the three R's and rarely anything else; if the school contains intellectual and moral misfits, for which the community does not provide houses or special educational facilities; if the school is not followed by a local supplementary school which provides for a continuous study after the pupils' fourteenth year of age; if the authorities consider luxuries such things as waste baskets, cuspidors, charts, globes, maps, and other appliances; if the school is attended by needy, underfed, or hungry children; if the school is defrauded of its claim upon regular attendance by greedy factory owners and farmers; if the school is one governed by school committees the members of which rarely if ever cross its threshold; if it is a school that is governed by men who send their own children to private schools and academies, but especially if it is ruled by men for whom the school is merely a political object of graft.

Upon such schools a part of the aforesaid guilt may be heaped by those who should beat their breasts and cry: "Lord, have mercy upon us, for we are the sinners." But to throw stones at all the schools, and charge them with producing criminality, is accusing the State and the community of not doing their duty, for in a civilized country every man and woman is part of the State and community, and schools which are involuntary accomplices of criminality are festering sores on the body politic.

MOVEMENT TOWARD FREEING THE SCHOOLS FROM THE CONTROL OF THE CHURCH IN GERMANY.

The people's or elementary school of Prussia, and of central Europe generally, having been first created by the church in the time of Luther, the church, to this day, regards it as its legitimate offspring, however much conditions of state and society may have changed. The clergy insists upon its historic right of supervising the schools, and this naturally leads to much friction between teachers and local supervisors. That the idea of separating church and state, already realized in France, commends itself to other European countries is seen from the fact that already four cantons in Switzerland, namely, Geneva, Basel, Zürich, and Appenzell, have adopted the French policy and confirmed it by a referendum. Similar steps are aimed at by many Austrians who advocate the separation of church and state.

But that the idea should find such favor in Germany, the battle ground of the Reformation, is a significant fact worth recording. The diet of the Duchy of Saxe-Meiningen has just discussed a new school law, in which teachers are entirely freed from church duties, which used to be part of their regular functions. Likewise the clergy are excluded from the supervision of schools, and every school supervisor, superintendent, or inspector must be a professional teacher. Religion as a branch of study is taught by the clergyman of the parish, who is,

in the personnel of the school, neither subordinate nor superior to the class teacher. The educational press is hopeful that such a school law will act as an example to other states of the Empire, and promote beneficial peace between conflicting views.

COURSES FOR STUTTERING CHILDREN.

The Austrian press reports upon a novel feature of school work, which promises to prove most beneficial:

An interesting addition to the course of instruction in the public schools of Vienna is to be made by providing classes in four city districts to overcome the defects in speech of children who stutter. The length of the course is to be five weeks, and instruction is to be given during two hours of each week day. The number of pupils in each class is limited to eight, as a class can not be conducted successfully with a larger number. The children are to withdraw from other school attendance, as it is essential that they devote themselves exclusively to the course for the cure of stuttering. In order to be admitted to the classes the children must present medical certificates that they are free from any organic disease which would interfere with the purpose of the instruction.

The cooperation of parents is especially important to the success of the cure. During the period of special instruction it is necessary that the children have a separate room at home, where they can practice the exercises given them without any disturbance whatsoever. The parents must undertake to have the children practice their exercises at home for at least four hours daily, and during the first two weeks not allow them to speak at all, except to practice the exercises prescribed by the course of instruction. Keeping silent is of such importance that the success of the course depends upon this requirement being strictly observed. Parents are particularly advised never to cast any doubt upon the effectiveness of the course or of the teachers. It is well known that stutterers lack self-confidence, and this must be taken into account in the treatment. The children should be encouraged by calling attention to progress that has been made, for stutterers are extremely susceptible to praise. Parents, however, should be careful to make no experiments and to make no tests.

At the end of the five-weeks' course the instructor brings each pupil back to his regular school and indicates to his teacher what has been accomplished, besides giving advice concerning his further instruction. The teacher is requested to try to encourage the child and make permanent the new habits acquired. Children who have taken the special course in stuttering are examined afterwards each month in order to determine what permanent results have been obtained.

SUMMER HOMES FOR WOMEN TEACHERS—HOME FOR AGED TEACHERS.

"The minister of public instruction of Prussia has formed a plan for the benefit of women teachers," so the Journal of Education (London) reports. "On the coast of the Baltic and the North Sea there are quarantine stations which in summer and autumn are often unoccupied. It is proposed to put them at the service of the women teachers who may need rest from the toils of their vocation. The stations at Osternothafen, near Swinemünde, and at Nesserland, near

Emden, are the first to be used for this beneficent purpose. In them separate homes are arranged in which the teachers may live free of charge for four weeks, providing, however, their own food. The value of the gift is enhanced by the feeling that prompts it. And women, even more than men, need and esteem a recognition of their labors." But this is not the only advantage the women teachers of Germany have over their male colleagues. In the scheme of pensioning teachers, the women invariably arrive at the highest grade of the annuity scale on an average ten to fifteen years earlier than men. The smaller power of resistance in woman to the baneful effect of schoolroom duty upon health is thus recognized officially.

The men teachers of Germany have shown a praiseworthy example of charitable and providential action for their own aged invalids by buying and comfortably equipping an extensive home for aged teachers at Keilhau, in Saxony. It is an institution similar to that which the International Typographical Union in this country maintains in Colorado for aged and infirm printers. The example of the German teachers proves that the spirit of cooperation is alive in them. A country that can boast of a corps of teachers which maintains a national organization of 119,000 paying members, possesses an unfailing source of intellectual and moral rejuvenation and regeneration in its schools.

SCHOOL GARDENS IN CENTRAL EUROPE.

The question of establishing school gardens in connection with rural and suburban, as well as city schools, though quite old in Europe, is coming to the fore in our country since the introduction of nature study in the courses of study of the lower schools. It may therefore be of interest to know what European countries are doing in this matter. Mr. E. Theophilus Liefeld, United States consul at Freiburg, in Baden, reports as follows:

Sweden has had school gardens for many years past, and their number now amounts to several thousands. Belgium, Switzerland, Austria, Germany, and France have all taken up the idea. Wherever it has been carried out the results are recognized as being most valuable, and people wonder that they did not think of it before.

It has been found that children take up the study of horticulture with great interest and with much success, that they turn every little bit of ground at home to account and provide the family with vegetables. Taught the latest and best systems of agriculture, they develop into really intelligent agriculturists, and are ready to discard old and wasteful methods for the newest and best.

As an example of what is being done in this way, take the case of Austria. Here, in the country districts, many schools have plots of ground varying in extent from an acre upward, where a thorough grounding in agricultural science is given. The younger children are taught the use of the spade, hoe, rake, trowel, and watering pot, together with such knowledge as suits their young minds regarding peas, beans, cabbage, potatoes, apples, pears, plums, strawberries, cherries, carrots, onions, parsley, and tobacco.

This is easy and pleasant work compared with doing sums, or writing and reading in the indoor school. Such young children, 6 years old and upward, are also familiarized with the habits of a few of the commoner animals, the swallow, titmouse, sparrow, lark, finch, mole, hedgehog, caterpillar, butterfly, and May beetle.

For older pupils the field is very extensive. They learn about the germination of seeds, the anatomy of plants, with the uses of their various parts—stem, roots, leaves, buds, flowers, and fruit. They are shown how to plant slips, to plant flowers in pots, to graft, and to transplant. They are taught to lay out a small nursery, to prepare the ground, to sow seeds, and to care for the plants during their growth. The very important subject of fertilizers is fully explained, as well as the dangers from insects, and the remedies. Then they learn how to gather seeds and how to keep them, and how to recognize poisonous plants. Gradually the whole science is unfolded. The pupils are taught the advantages and disadvantages of the various kinds of soils; how to use manure, and its virtues as compared with the various fertilizers; how to choose seeds, and the various methods of sowing them by hand, with tools, etc. As the plants grow they are practiced in weeding, thinning, hoeing, hilling, etc., and the effects of the various operations are explained. Plowing, harrowing, and rolling; harvesting hay, grain, turnips, potatoes, carrots; preserving the harvest in stacks, barns, and pits are operations for the advanced student. At the same time the boy is made acquainted with the best knowledge concerning animals. The pupil learns all about drainage and irrigation, as well as meteorological phenomena—rain, mist, dew, ice, wind—from an agricultural point of view. Obviously, a boy who goes through a complete training of this kind must make a better agriculturist than if he got his knowledge in a haphazard way. And this fact is proved by the great success of the German and Scandinavian farmers in America.

Girls, as well as boys, go through systematic training in the garden schools of central Europe. They learn the qualities of a good laying hen, how to care for their fowls, how to treat milk, to skim it, churn it, and to make cheese, and also the use of various instruments for testing the density of milk, the amount of its acidity, and the quantity of cream.

An article on caring for city children out in the open during the summer, published in the last annual report of this Bureau (pp. 1257–1262), shows that the endeavors of all who have the education of the growing generation at heart aim at bringing children, as they were in years gone by, into close contact with nature.

NUMBER OF PUPILS IN A CLASS.

A severe criticism of the Prussian schools has recently been expressed by a Danish commission of twelve citizens of Copenhagen sent to Berlin to study the administration of schools. Though the criticism was severe, it had in it no sting of personal rancor, and was therefore accepted by the authorities and teachers of the German capital in the same kindly spirit in which it was uttered. It had reference to the fact that the law in Prussia still allows 60 to 65 pupils in one class room; that though the Berlin school board had succeeded in reducing this number to 45 or 46 in the schools of the capital, this number was much greater than in Copenhagen, where it had been reduced by city ordinance to 35. It was stated in the report of the

commission that a Danish law of 1814 had determined that 80 children should be the highest number given to one teacher. In 1856 the maximum number had been reduced to 50, and the school law of March 24, 1899, had fixed it at 35. As soon as that number is exceeded, a new class room and teacher is to be secured. If this be impossible for any length of time, the authorities are entitled to send the surplus children to a neighboring public school which has the desired accommodation or to a private school at public cost.

But Denmark is not the only northern country in Europe which has reduced the number of pupils per teacher; Norway has a legal maximum of 40, but the law there provides that in cases of necessity the number may temporarily be 50, until relief is secured by the employment of an additional teacher.

In the Netherlands the law provides for a maximum of 40 to 45 pupils to the teacher, but in Amsterdam the classes have an average of 33 pupils to the teacher, while the statistics of the Kingdom reveal an average of 37.

ILLITERACY IN HUNGARY.

The population of the eastern half of the Empire of Austria-Hungary was 19,254,559 in 1900. The Royal Hungarian Central Statistical Office publishes the results of the latest inquiry into the status of illiteracy of the Kingdom, to wit, 5,279,787 male and 4,316,841 female inhabitants could read and write; that is, a total of 9,596,628 persons. Deducting this number from the total population leaves 9,657,931 illiterate, or about one-half the population. This half, however, includes 3,064,908 under ten years, which number should be deducted to ascertain the degree of illiteracy as is done in this country. That still leaves 6,593,023, or about 34 per cent of illiteracy. Hübner's Statistical Tables credit Hungary with 478 illiterates among 1,000 recruits, which may seem too high an estimate, but if we consider that an army recruit is about 20 years old and that the phenomenal efforts in behalf of public education in Hungary date from 1895, it is quite possible that the estimate of 47.8 per cent of illiteracy among army recruits is correct, but it is quite within reason to expect a rapid decrease in the number of illiterates in that country, since great sums have been spent in building new schoolhouses and in preparing teachers. The friction arising from the use of different languages among the various nationalities in all the eastern European countries affects the healthy development of public schools, it being often difficult to provide the different groups with separate schools.

SECONDARY EDUCATION IN GERMANY.

Secondary education, for many years the storm center of educational activity in Germany, has entered upon a condition of peace and mutual forbearance. The Emperor, as King of Prussia, decreed in 1900 the equality of the three kinds of nine-year high schools in existence in almost all cities of the country, to wit, (1) Gymnasia, or classical schools with Latin, Greek, and two modern languages; (2) Realgymnasia, or schools with Latin and two modern languages, but no Greek, and (3) the Oberrealschulen, or schools with no Latin, but with two modern languages and a correspondingly larger amount of natural science and mathematics. He also fixed the legal status of the simple Realschulen, the course of which is one of six years only. The result is that there is noticeable in educational yearbooks, in the press, and in meetings of associations of secondary-school teachers a willingness to meet on common ground, the former acrimony having disappeared.

While, then, it appears that the new study plans for high schools agreed upon in 1900 by a royal commission have removed, at least for a generation, much of the difficulty adhering to all secondary education for boys, there is still a weak point in the system of secondary schools of Germany. It is found in the girls' high schools. For many years the Government did not even recognize girls' high schools as belonging to the system of "höhere Schulen," or secondary schools, as we term them. They were classed in official reports as "advanced girls' schools," meaning advanced elementary schools. It is to the honor of the leaders and teachers of the girls' schools that a radical change has taken place in the conception of officials and parents regarding the character and work of the girls' schools. The great influence which pioneer women students have exercised upon the public has led to the establishment of a few girls' Gymnasia, or classical high schools, the graduates of which claimed and obtained admission to the universities, first outside the Prussian universities, later in Prussian institutions also. These classical high schools for girls not only awakened the desire, but also the demand, for the improvement of other girls' schools, hitherto classed as "advanced girls' schools." There is now an improvement in such schools noticeable, most gratifying to all who recognize the justice of secondary as well as higher education for women. The Royal Government and the authorities of all large cities in Germany aid this movement toward an improvement of girls' education. But there is as yet no definite plan agreed upon, and it is a well-known fact that no German State or city government proceeds to legislate in behalf of education unless the plans for such action have long been prepared, discussed, and matured.

Doctor Holle, the Prussian minister of public instruction, received a delegation of ladies representing the Congress of Higher Education for Women which held its meeting October 11 and 12, 1907, in Cassel. Mrs. Steinmann, who acted as chairman of the committee, emphasized the fact that the resolutions of the congress which the committee were to submit to the minister were a unanimous expression of all the different groups, and therefore embodied the wishes of the women of the entire Kingdom. She explained to the minister the general plans agreed upon, and showed in what way they differed from the Government's plan of reorganization. The minister requested the ladies to set aside all differences of opinion and aid in securing the reforms planned by the Government, so that the legislature might accept that plan and thus move in the direction of possible development. Miss Doctor Bäumer pointed to the fact that already a number of six or seven grade girls' high schools existed, built upon a foundation of six or seven elementary school years, and that the Government's plan of establishing high schools of only four-year courses would scarcely be in fulfillment of the resolutions of the Cassel congress of women. She further requested that the minister, in his proposed bill, give the existing six or seven grade girls' high schools a chance to continue their work under Government supervision, so as to make it possible to gather experience in the secondary education of girls. Mrs. Professor Weber suggested that talented girls be given permission to attend boys' classical high schools, as is done in South Germany, so as to afford them opportunities to prove that they are able to learn what is required of boys in preparation for university study. The chiefs of the division of secondary schools in the ministry discussed all the resolutions of the Cassel congress, as well as the bill now before the diet, which has the support of the Government, but with which the women are not satisfied, because in the official scheme girls' education is left on a lower plane than boys' education.

NUMBER OF STUDENTS AT GERMAN UNIVERSITIES.

During the winter of 1906–7 the twenty-one universities of Germany were attended by 45,136 students, of whom 254 were women. The increase over the corresponding term of last year is 2,740 students. In addition to these numbers, 5,509 persons availed themselves of the privilege of listening to lectures without matriculating as members. Of this class 2,105 were women. It is therefore plain that only a small proportion of the women have matriculated, and that the greater number are admitted only as visitors.

As regards the various courses, the number of Protestant students of theology was 2,208 and of Catholic, 1,708. The number of students of law is given as 12,146; of medicine, 7,098; of philosophy, history, and languages, 10,985; and of mathematics and natural science, 6,234. The largest increase of students has taken place in medicine and philology, while there is a continued scarcity of Protestant theological students. The best attended university is that of Berlin, with 8,188 matriculated students; next to this comes Munich, with 5,567; Leipzig, with 4,466; Bonn, with 2,992; Halle, with 2,250; and then Breslau, Göttingen, Freiburg, Strassburg, and Heidelberg. The last two have improved their position in the tabulated list of attendances, whereas Tübingen, Giessen, and Erlangen, which are favorite universities in summer, take lower places in the list than formerly.

Consul Thomas H. Norton, of Chemnitz, reported in August, 1907, that the attendance in German universities for the summer semester showed a marked falling off in foreign students. The total of 3,766 is decidedly inferior to the preceding winter semester, 4,151, and is also below that for the summer semester of last year, 3,889, which figures represent high-water mark. This decrease is chiefly due to a notable lessening of the number of Russian matriculants, partly also to a dimunition in the attendance from Switzerland and America. The graduate courses in the universities of the United States are to-day offering such admirable opportunities for advanced students in nearly every field of human thought that there is little inducement for the young American to cross the ocean other than that which impels the German students to migrate from one to another of the famous seats of learning in Europe.

Foreigners now comprise 8 per cent of the students attending the German universities. The corresponding figure for 1906 was 8.6 per cent, and for the winter semester of 1906–7, 9.2 per cent. There are 261 students now in attendance from America.

STATISTICS OF PRUSSIAN NORMAL SCHOOLS.

The attendance at normal schools in Prussia was published in detail in November, 1907, by the minister of public instruction. The following summary will suffice to show that, taking the entire teaching force of Germany at 150,000, there are about 17.3 per cent in preparation to fill the many vacancies caused by death, retirement, and resignation. Provinces not mentioned in Tables 2 and 3 have no institutions of the kind.

TABLE 1.—*Number of students in Prussian normal schools for men.*

Provinces.	First-year students.	Second-year students.	Third-year students.	Total.
East Prussia	357	315	275	947
West Prussia	341	275	263	879
Brandenburg	446	375	334	1,155
Pomerania	269	271	231	771
Posen	398	382	290	1,060
Silesia	731	662	591	1,984
Saxony	452	382	360	1,194
Schleswig-Holstein	212	173	152	537
Hanover	428	360	343	1,131
Westphalia	404	333	318	1,055
Hesse-Nassau	225	211	212	648
Rhineland	630	611	550	1,791
Total	4,893	4,350	3,909	13,152

TABLE 2.—*Number of students in Prussian normal schools for women.*

Provinces.	First-year students.	Second-year students.	Third-year students.	Total.
Brandenburg	62	59	57	178
Posen	65	58	57	180
Silesia	93	94	59	246
Saxony	41	37	37	115
Schleswig-Holstein	32	31	26	89
Westphalia	125	125	119	369
Hesse-Nassau	21	.....	.....	21
Rhineland	127	121	127	375
Total	566	525	482	1,573

Besides the regular normal schools, there are a number of supplementary three-year courses arranged to meet the extraordinary demand for teachers, since their ranks have been thinned during recent years by the resignation of young men who enter industrial and commercial pursuits.

TABLE 3.—*Attendance at supplementary normal school courses in Prussia.*

Provinces.	First-year students.	Second-year students.	Third-year students.	Total.
East Prussia	.....	.....	53	53
West Prussia	70	.....	27	97
Brandenburg	.....	.....	47	47
Pomerania	.....	.....	28	28
Posen	91	.....	.....	91
Silesia	223	27	53	303
Saxony	34	50	67	151
Hanover	.....	29	59	88
Westphalia	.....	.....	50	50
Hesse-Nassau	.....	.....	30	30
Rhineland	.....	.....	81	81
Total	418	106	495	1,019

This shows a grand total of 15,744 normal school students in the Kingdom of Prussia. That State has a trifle over 60 per cent of the population of the Empire. The same ratio among normal students would give a total of 25,907 students in the Empire. But while in

Prussia the courses of normal schools are of three years, in some of the minor States the courses are of four to six years; hence the number given is only a rough estimate at best.

VACATIONS FOR POOR CHILDREN IN THE COUNTRY AND AT THE SEASHORE.[a]

[The following is taken from the "Sozialstatistische Correspondenz" (published at Charlottenburg) October, 1907.]

The last report, that of 1905, of a central committee existing since 1885 gives the statistics for 1905 of all the charitable efforts in Germany made to secure summer vacations in the country or at the seacoast for children of poor parents. In 1905 there were in Germany as many as 241 societies, which secured vacations for 53,604 children (48,081 in the previous year). The societies paid for the maintenance of these children 1,595,975 marks (1,391,101 marks in 1904), or, in American money, $378,246 ($329,791). These amounts were contributed by private societies, by municipal and church authorities, and by insurance associations for invalids. All these children needed special care, being either physically weak or diseased. Of the above number, there were sent to mineral bathing springs 10,344 (9,138 in 1904); one-third of these were kept in houses owned by the societies, and two-thirds were kept in sanitariums or in rented quarters; 4,695 (4,045) children were sent to the seacoast, of whom one-half were lodged in houses owned by the societies; 21,903 (20,556) were sent to vacation colonies or were lodged on farms. Lastly, 16,462 (14,342) children were nursed in so-called city suburban colonies and at "milk stations."

In many cases, where impaired health seemed to demand it, children were kept at the seacoast, at mineral baths, or on farms for a longer period of time than their school vacation allowed, arrangements having been made with the school authorities to that end.

The daily costs of maintenance at mineral springs were from 31 to 76 cents per child; at the seacoast from 26 to 83 cents; in vacation colonies from 12 to 59 cents; on private farms from 16 to 49 cents per child.

It is interesting, also, to know what per cent of the population in some large cities were thus charitably cared for:

	Per cent.		Per cent.		Per cent.
Hamburg	1.04	Bremen	0.68	Magdeburg	0.10
Leipzig	.89	Charlottenburg	.68	Gelsenkirchen	.09
Düsseldorf	.77	Barmen	.66	Chemnitz	.08
Strassburg	.75	Königsberg	.10	Bochum	.06

[a] See also Annual Report of 1906, Chapter XXVI.

The efforts made to give children of the tenement districts during vacation some forest and mountain air, or sunshine and ocean breezes at the seacoast, are certainly most praiseworthy. Still, if we consider that so far only a small percentage of the children, namely, about 5 per cent, have enjoyed the privileges thus provided, it seems like a drop in the bucket; but the reduction in the death rate among children proves that the efforts thus far made are not useless.

SCHOOL INSPECTORS IN PRUSSIA.

School inspection or supervision in Prussia used to be an exclusive prerogative of the parish clergymen. During the second half of the nineteenth century the government began to appoint county inspectors who were professional teachers; especially normal school principals and teachers, directors of secondary schools, and other prominent teachers were chosen to act as inspectors of the lower schools. But in many cases clergymen continue to perform the duties of supervision, and they, like many professional inspectors, devote only a part of their time to the schools. Nearly three-fourths of all the school inspectors have other offices, being priests, preachers, physicians, normal or high school principals, or teachers.

There are at present (in 1907), in a total of 1,272 county school inspectors, 941 who devote only a part of their time to the duty of visiting schools and reporting upon the results of their observations. Since these inspectors do not appoint teachers, the choice of teachers being one of the duties of the local school boards, the inspectors have more of an advisory than an administrative office, except in large cities, where naturally the school inspectors, being called school councilors, have no other duties save school supervision and administration.

It is interesting to notice how constant the proportion of inspectors has remained who are school supervisors and examiners exclusively, and that of inspectors who perform such duties only as supplementary duties. This is seen by comparing the following numbers:

Year.	Inspectors of schools exclusively.		Inspecting schools as an additional duty.		Total.
	Number.	*Per cent.*	*Number.*	*Per cent.*	
1882	181	20.11	719	79.89	900
1887	229	21.01	861	78.99	1,090
1892	246	20.26	968	79.74	1,214
1897	277	22.30	965	77.70	1,242
1902	316	25.77	914	74.23	1,230
1907	331	26.00	941	74.00	1,272

Twelve hundred and seventy-two supervisors of schools in a country with a population of 37,300,000 and a school population of about 6,200,000 does not seem a large number, particularly not if three-fourths of them act as supervisors only in leisure hours. This is, however, easily understood if we consider the important fact that every Prussian and, for that matter, every German teacher has a professional training; that is, either a normal school training of three or four years or a university training of even a longer period. The election of a teacher by the school board has to be confirmed by the government of the county (Regierungs-Bezirk) or of the province, and that is done only after a close scrutiny of his credentials and antecedents. Then he serves two years on probation, so that a teacher rarely reaches permanent appointment before he is 25 years old.

Such teachers do not need supervision as those do who lack that systematic training for their duties so necessary for success in the schoolroom. There are many schools in the rural districts of Prussia where an inspection is made only once or twice a year, or even once every two years.

CHAPTER VI.

EDUCATIONAL ACTIVITY IN FOOCHOW, CHINA.

By Julean H. Arnold,
Late vice-consul in charge, Foochow.

To appreciate the force and the extent of the educational revolution which is now manifest in Foochow, China, one should have some conception of the conditions previous to the inauguration of this new movement.

There is probably no one factor which has done so much toward keeping the Chinese people intact as a nation as has the system of education which has obtained in China through centuries without a change. Dynasties have been overthrown; conquering hordes of aliens have swept over the country; but these, like waves washing over a rock, effected few perceptible changes in the Chinese peoples or institutions.

THE CHINESE EDUCATIONAL SYSTEM.

GENERAL CHARACTER.

That system of education, or instruction, as it might better be termed, which has obtained in China with little variation for the past twenty or thirty centuries, may be briefly described as follows:

At 6 or 7 years of age the son whose parents would have him enter the ranks of aspirants for literary honor or official position is placed either in the hands of a retained teacher or in a school. If the parents have the money, they generally retain a tutor; if not, several families combine to secure the services of a teacher. Public primary schools are unknown. When the teacher is secured and a room is borrowed, the boy enters upon his schooling armed with a book called the "Trimetrical Classic," or "Three Character Classic" (called three-character classic because composed in rhythmical lines which are divided into two parts each containing three characters). This book, written about seven hundred years ago, may be called a sort of an abridged compendium of ethics, biography, history, and science, besides being a guide to the child's future course of study. The first sentence which the child encounters reads, "Men at their birth are by nature radically good; to this they all approximate, but in practice they widely

diverge." (From R. C. Bridgman's translation.) Naturally, it is not expected that the child will comprehend the meaning of this bit of philosophy, nor is he expected to understand the meaning of any of the material which his teacher sets him to memorizing the first four years of his school career, unless it be certain exhortations to obedience and to study. For four years the child's one task is to familiarize himself with the sounds of the Chinese characters which he finds in the text assigned to him. In a majority of cases these four years constitute the sum total of the child's schooling.

If one were to visit a Chinese school of the ordinary type he would be greeted upon approaching the school with a babel of sounds, which he might at first mistake for the exuberance of childhood at play; but a peep into the school room would convince him of his error immediately. He would see from ten to twenty boys seated upon narrow benches with Chinese texts before them; each irrespective of the presence of the others calling at the top of his voice, in a sing-song tone, the characters which he is supposed to see before him. It would be pure accident if two boys were bellowing the same lesson simultaneously, for each pupil is a class by himself. When the juvenile Confucius thinks he knows his lesson or, more often, when the old teacher thinks he ought to know it, he presents his book to the teacher and proceeds to recite that which he is supposed to have memorized. If a pupil shows any pretence to quietness or inability to cram, he is liable to a few raps from a ferule, which is the teacher's constant companion.

The Chinese schoolboy knows no play in connection with his schooling. Play is unbecoming the dignity of a scholar. The child is supposed to carry himself as a little Confucius from the day he enters upon his schooling. No Saturday afternoons and Sunday holidays, which mean so much to the Western lad in recreation and play; in fact, the Chinese boy must be in school at daylight, and, with the exception of his meal hours, spend his whole day there. He has a month's holiday in winter for Chinese New Year, and, if he be a farmer lad, he may have a sort of an enforced vacation during harvest time, when his services may be in demand in the rice or millet field. One could scarcely speak of the Chinese boy's school days as happy school days.

After the lad has memorized the Trimetrical Classic, the Four Hundred Proper Names, and the Thousand-Character Classic, he has completed the elementary or purely parrot stage in his educational career. He is then led through the four books, Confucian Analects, Great Learning, Doctrine of the Mean, and the Works of Mencius; then through the Poetical Classics, Book of History, Book of Changes, and the historical works of Confucius, known as the Spring and Autumn Annals, and through certain commentaries. This order is

not adhered to everywhere, but these are the subjects which comprise his course. The one object of the student's education is to prepare him to construct essays which will embody the spirit and language of these ancient writers in such a way as to best satisfy the examiner before whom he must appear for his first degree.

EXAMINATIONS FOR LITERARY DEGREES.

By the time the student is ready to go up for examination for his first degree, he will have spent from twelve to twenty years at his task, the amount of time required depending upon his ability to cram. A student ripe for examination is one who has so fully imbibed the heterogeneous mass referred to in the above paragraph as to be able to take sets of characters or expressions from these model productions and, by different arrangements from those of the originals, produce the same sense or lack of sense as is found in the originals.

Examinations for the first degree are held once every three years by literary chancellors sent from Peking to the various provincial capitals for that purpose. From ten to thirty thousand candidates, the number depending upon the density of population of the Province, present themselves for the test. Those who are able to pass, the number being from one to five in each hundred, depending upon the number of degrees to be distributed, find themselves in possession of their first degree; this entitles them to wear official dress with a gilt button of the lowest grade, and to be exempt from criminal trial or penal servitude until after their diplomas may have been taken from them by officials of higher rank. In brief, this first degree entitles its possessor to a certain amount of respect, consideration, and honor from those not possessing official rank.

The examinations for the second degree are likewise held once every three years in the provincial capitals. Grand examiners, especially deputed by the Emperor for the purpose, are sent from Peking to each of the provincial capitals to conduct these examinations. Like the examinations for the first degree, these are held in examination halls consisting of long rows of cells, each cell measuring 3 feet in width by 4 feet in depth. Stretched across the interior of each cell are two boards, so arranged that one may serve as a seat and the other as a table. For three periods of three successive days each the candidates are confined in these cells day and night. The examination schedule is something like the following:

First period.—1. Three themes from the four books for prose essays. 2. One theme from the four books for poem essay. Each essay to consist of 700 to 800 characters and each poem essay to consist of 12 lines.

Second period.—Five themes from the five classics for prose essays.

Third period.—Devoted to questions on miscellaneous topics selected by the examiners from any source.

As in the examination for the first degree, the number of those who pass is very small, generally about 300 degrees being allowed for 30,000 candidates.

The examination for the third degree takes place in Peking once every three years. Like the examination for the second degree, this is also divided into periods of three days each, and subjects are chosen from similar sources. Here also no more than 300 degrees are distributed among 30,000 candidates. Those who attain this degree are divided into three classes, in the order of their standing, as determined by the examination. The first class are eligible to appointment to the Han Lin College, or the National Academy of Literature; the second class receive appointments to subordinate posts in Peking; the third class are nominated to the rank of "expectant" officials in the various provinces.

Any Chinese who can show that none of his ancestors for three generations have been butchers, barbers, executioners, priests, or actors, is eligible to appear for examination for the first and second degrees.

THE CHINESE SCHOLAR.

The ordinary Chinese scholar is a poor individual indeed. His education has taught him to consider all pursuits as mean in comparison with the pursuit of learning. Even though he may have succeeded in attaining his first and second degrees, which the majority never do, yet his schooling has rendered him an outcast in the world of usefulness; unless he is able to depend on his relatives for support there is only one calling open to him, which is school-teaching. This is regarded as a distinctly respectable calling, for Confucius himself was but a teacher. There is, however, so much of an oversupply of would-be teachers that the profession commands little or no financial respect. According to the Chinese conception a teacher is a sort of a reservoir of learning; having filled himself from the proper sources he can furnish it to all who would pay the price. That this price is not exorbitant may be judged from the fact that the primary or intermediate school teacher does well to receive for what he has to offer in the way of teaching ability the sum of $5 a year, in addition to a scanty allowance of rice and fish or meal. The better equipped and more efficient, such as one would find teaching in what might be called high schools, often receive as much as $5 per month for their services. It is no little wonder that the Chinese scholar finds himself stranded upon the shores of utility; for after fifteen or twenty years of schooling he has not been taught the simplest operations in arithmetic, nor is he conversant with the geography of his own country, not to mention his absolute ignorance of that of any other,

nor has he studied the modern history of his own country; and as for the natural sciences, a child 8 years of age in any western country knows infinitely more. It is not strange that in giving all of his attention to the wisdom of the ancients the Chinese scholar should look amazed when informed that the earth is round.

FACTORS TENDING TO PERPETUATE EDUCATIONAL SYSTEM.

There are several factors which have encouraged the perpetuation of this educational system through all these centuries. First, respect for learning. According to the Chinese idea mankind is divided into four classes, namely, scholars, farmers, merchants, and laborers, in the order given. The Chinese proverb says, "If he can study the peasant's son may become a peer, and the nobleman's son who can not must come down from his sphere." The masses in China, though steeped in ignorance, are imbued with an intense respect for learning. Secondly, civil-service examinations, by extending to the masses an opportunity for themselves or their children to rise to positions such as a scholar might achieve, that is, literary honor and possibly official position; still these classes have remained through countless ages contented with what was in reality little more than a forlorn hope. Thus the more ambitious among the masses in China have always had an outlet through which they might direct their ambitions without endangering the pre-established customs and institutions. Thirdly, uniformity in the system of examinations. By a uniform system of examinations throughout the Empire, the literati, which term embraces the ruling class as well, have been cast in one mold, with thoughts and aspirations varying little over centuries. "Would you know the affairs of the Empire, read the works of the ancients," says the Chinese proverb.

So long as China was isolated from the rest of the world she found it no difficult matter to perpetuate this system, but she is now becoming convinced that the wisdom of the ancients is no longer adequate to hold her people together and to maintain her nation intact. She must now place her educational system on a western basis if she would train her people to cope with western peoples and western institutions.

What is being done in Foochow toward giving the people western education I will now attempt to set forth.

MISSIONARY SCHOOLS IN FOOCHOW.

The salutary effect of missionary effort in China is entirely underestimated. Some day, when China gets upon her feet, she will gladly erect monuments to the memories of those ardent missionaries whose whole lives have been devoted to the uplifting of the Chinese people. Much of the adverse criticism directed against missionary effort in China is based upon ignorant prejudice, rather than upon a knowl-

edge of facts. It is through schools and hospitals on the western model that the more enlightened missionary bodies are striving to Christianize China. These know that Christianity without enlightenment and sanitation is little better than no Christianity at all. Missionary hospitals and schools are not the creation of the past few years, for many of these institutions are celebrating their semicentennial anniversaries. Their work has been quiet and unostentatious, but the Chinese are beginning to recognize the superiority of these institutions over their own.

The missionary educational institutions located in Foochow are as follows:

American Board Mission (Congregational): Foochow college and preparatory academy, theological seminary, girls' college, girls' intermediate school, kindergarten training school, kindergarten, hospital for men, hospital for women.

Methodist Mission (Anglo-Chinese institutions): College, theological seminary, girls' seminary, girls' school, normal school, primary schools, orphanage, two hospitals for women.

Church Missionary Society (Church of England): Theological seminary, boys' school, girls' school, school for blind boys, school for blind girls, medical college and hospital.

Of the schools in this list, the Foochow College (Congregational), Anglo-Chinese College, and the Church Missionary Society Boys' School are schools which furnish to boys an education such as is furnished by a combined intermediate and high school in America, except for the religious instruction that the missionary institutions include in their curricula. The work in these institutions is distinctly high class, the foreign instructors in charge of the schools being for the most part college-trained men and women, and devoted to their work. The subjects taught in the high-school departments of these institutions embrace algebra, geometry, chemistry, physics, the natural sciences, geography, history, literature, Chinese, English, economics, psychology, Bible study, and physical culture.

One of the admirable features in connection with the Foochow College is its work in military drill. I was indeed agreeably surprised when shown a class of 40 students being taken through the setting-up exercises by a Chinese instructor. Educated in a military school in Foochow, under Japanese instructors, he has acquired that German vim and precision which is now characteristic of Japanese military drill, but diametrically opposed to everything Chinese. When the 250 boys attending this school are lined up in military formation they present a very imposing spectacle.

The eminently practical nature of the work being done in this school deserves most favorable comment. While visiting a class in English composition I had the pleasure of hearing a paper entitled

"The Need of a Sewerage System for Foochow." After traveling for an hour through the dirty and narrow streets of Foochow city, streets so narrow that the widths are no greater than one's extended arms, paved with ill-fitting granite slabs, which answer the dual purpose of making a solid roadway and of serving as a cover for a drain through which much of the sewage of a city the size of Boston is expected to pass, one is quite prepared to appreciate a paper setting forth the need of a sewerage system for such a city. If much of the so-called respect for learning which has obtained in China for centuries had been converted into respect for cleanliness China would be infinitely better for it.

The majority of this school's students live upon the premises in dormitories provided for them. They pay their own living expenses, which amount to no more than $1.25 a month. The Chinese student's bill of fare is the acme of simplicity, consisting of rice, with a bit of fish, vegetables, and pork or beef.

There is connected with this college a theological seminary in charge of Rev. Mr. Hodus.

Both the Foochow College and the Anglo-Chinese College have their own printing presses, which are run in conjunction with the missions which these institutions represent.

The Anglo-Chinese College is an institution doing much the same character of work as the Foochow College. Its student enrollment is somewhat larger, its buildings and grounds are more extensive, and its location is somewhat more healthful, being located in the foreign settlement. It is under the direction of Mr. Gowdy, an American college man, and a man whose whole thought is wrapped up in his work. This school has a large and loyal body of alumni, which only recently subscribed a sum sufficient to build a clock tower for the new chapel in course of erection.

The graduates of these two colleges occupy positions as preachers, teachers, customs clerks, postal clerks, compradores in foreign firms, etc.

Many of the native teachers in these colleges are alumni and are doing creditable work. Mr. Ding, an alumnus of the Anglo-Chinese College, conducts a class in geometry in this institution and is doing remarkably good work. As I entered his class room a student was in the midst of demonstrating a theorem, the construction of which he had before him. Mr. Ding allowed his pupil to become hopelessly entangled before making any pretense of going to his rescue, as one might have expected him to do. In fact, the lad had reached that point where he saw for himself that he was wrong. Mr. Ding proceeded to unravel with the boy the entangled argument and to assist him in discovering for himself wherein he had proceeded on a wrong hypothesis. I only mention this incident to show that Chinese teachers are capable of considerable when rightly trained.

MISSIONARY GIRLS' SCHOOLS.

The most interesting of all my visits to various educational institutions in Foochow was that to the Church Missionary Society's Girls' School. This school is doing a remarkably effective work among Chinese girls. Girls' schools found no place in the old Chinese régime, hence the education of girls in China has been sadly neglected, and, as a result, the position occupied by woman in China has been most deplorable. Hence these missionary schools for girls are in a position to do much good work. Miss Lambert, the actual head and moving spirit of the institution above referred to, certainly deserves much credit for the admirable manner in which she is conducting her school. The school was established in 1863 in Foochow city. A few years ago it was moved to the present site. Its present location is a very sensible one, for it is beyond the crowded and congested district in the city, and quite far enough from the foreign settlement to warrant its not being closed in by structures erected in the immediate vicinity. The buildings were designed by Miss Lambert, and one can not but be impressed by the sensible arrangement. The class rooms and dormitories are light and airy, and the chapel is strikingly neat and well designed. The whole effect is one of neat and tasty simplicity. When we visited the school Miss Lambert inquired as to what particular line of work interested us most. As the recitations are all conducted in Chinese, the consensus of opinion seemed to favor seeing a class in physical culture. This proved a revelation to us. Fifty Chinese girls marched into the gymnasium to Miss Lambert's playing, and after a series of marching exercises, all of which was done in perfect order, they proceeded to give an exhibition of what might be called musical tennis-ball juggling. Each girl is provided with two tennis balls, with which she executes a series of tossing exercises to music. This is a pleasing departure from the ordinary monotonous dumb-bell and Delsarte drills.

Chinese children are far ahead of western children in "showing off." Often when a visitor appears in a western school the teachers find it extremely difficult to get their pupils to show what they are really capable of doing. Chinese children seldom or never disappoint their teachers in this regard. The Chinese nature seems to be devoid of self-consciousness. As for the Chinese school girl, Miss Lambert says she lacks in originality, vivacity, and in general in those qualities which make the western girl more mischievous, but intensely more interesting. She finds the Chinese girls more plodding, steady, and mechanical in their work than the foreign girl. In their studies they do best in those subjects demanding powers of memory rather than powers of reason.

There are in this institution 225 girls, all of whom live on the school premises. The dormitories are plainly and neatly furnished,

and each girl is required to do her share toward keeping the rooms clean and in proper shape. Their daily bill of fare consists of rice, vegetables, and fish, with beef three times a week. Each student pays a tuition fee of $1 a year and furnishes her own books and stationery. The pupils range from 10 to 20 years of age.

The subjects taught comprise Scriptures, Chinese (spoken and written), Chinese classics, geography, history, elementary astronomy, physiology and hygiene, arithmetic, music, sewing, cooking, housework, and physical culture. The hours for study and recitation are 8 a. m. to 12 and 1.30 to 4 p. m., and for study out of class room 7 to 8 a. m. and 6.30 to 7.30 p. m. English is not taught.

Some years ago the work of the school was hampered owing to the fact that a large number of the girls were obliged to leave at the age of 15 to get married. At present none are permitted to leave before they reach the age of 18, and many remain until they have reached 20. As for the graduates, they for the most part marry; some have become teachers in the day schools and some matrons in boarding schools, while quite a number have married patrons of the school and native schoolmasters.

There are connected with this school three foreign and fourteen native teachers; these are all resident in the school. The native teachers, besides receiving their board and lodging, are paid from 50 cents to $1.50 a month. This may sound ridiculously low to a westerner accustomed to salaries ranging from $40 to $100 a month in similar institutions at home, but in China native schools have not yet opened their doors to female teachers, while the best male teachers, until very recently, could command no more than $5 a month, and even now there are thousands who are not receiving as much as $1 a month in addition to a scanty living.

It is scarcely necessary to enter into detailed descriptions of the other missionary girls' schools, for their courses of study are much the same and the character of their work is also remarkably good. These schools all emphasize the importance of the domestic sciences in their courses of study, and each year exhibitions are held at which the needlework of the girls is exhibited for sale.

There is a remarkable difference between the appearance of a Chinese girl who has been educated at one of these mission schools and the girl who has had no education. The one shows a brighter and more intelligent appearance and a more independent bearing than the other.

If one should happen to be in Foochow on an Easter Monday, he would have an excellent opportunity of seeing what the mission schools are doing for the girls and boys of that city. He would find assembled at the Methodist Mission Auditorium 1,500 to 2,000 boys and girls participating in the annual Easter Monday choral services.

As one views this vast assemblage of Chinese young men and young women, one can not but be impressed most favorably by the clean and intelligent appearance of the boys and girls making up this concourse.

MRS. WILKINSON'S SCHOOL FOR BLIND BOYS.

Before leaving the subject of missionary schools, it might be well to mention Mrs. Wilkinson's work among the blind boys of Foochow. Impressed by the utter lack of helpfulness of these unfortunate children, some of whom have had their eyes gouged out by cruel parents for acts of disobedience or to enable them to beg more effectively, Mrs. Wilkinson a few years ago established a school in which she could accommodate a certain number of these boys. She not only teaches these children to read and write, but to make brooms, brushes, and cane chairs as well. In addition, they are given physical culture and music. Here is a copy of an invitation which we received from these boys:

THE BLIND BOYS

OF THE

"LING GUONG CUIENG"

Request the pleasure of your company on

Saturday, April 7, at 2.30 p. m.

DRILL, RACES, GAMES.

Cha Cang, North Gate, Foochow City.

It was gratifying indeed to see these boys take such a delight in their drill, races, and games as they exhibited upon this occasion. Some of the boys read for us from their raised-letter text-books, and others presented us with specimens of writing made by punching holes through paper, after the fashion of the regular blind alphabet. These boys are being transformed from helpless, hopeless human beings into individuals capable of doing something for themselves and of appreciating some of the good things of life. Where the struggle for existence is so keen as it is in China, and where it is difficult for a large number of seeing people to provide the bare necessaries of life, one can easily appreciate the difficulty which must attend any efforts to place a blind person beyond the needs of charity. Even if these boys are to become charges on the State, their lives will not be of the hopeless sort which they would otherwise be.

A splendid tribute to the work of the missionary schools in Foochow was that contained in a composition written by one of the Foochow schoolboys under the title "Schools of Foochow." To quote from a

translation: "None of the graduates from the missionary schools have ever occupied high administrative offices in the Chinese Government, but most of them are employed as clerks in the customs and post-offices and as compradores in foreign firms. It is said that the most practical and useful men in the community have been supplied by these schools." The idea of producing useful men is one which has been foreign to Chinese educational work. There is now spreading over all of China a wave of reform in matters pertaining to education. Some communities are literally digging up their old antiquated systems by the roots and casting them aside for something new and better. The following observations were noted on a tour of inspection through the numerous modern schools which are now springing up in Foochow.

NATIVE SCHOOLS WITH WESTERN METHODS.

Foochow city has a population of about 600,000, while the province of which it is the seat of government claims 20,000,000. The little valley in which Foochow lies is densely populated, having something like 2,000,000 people. Thus Foochow, as an educational center, must provide for millions of people.

Schools which claim to be established on western lines are springing up so rapidly in Foochow that it is difficult for one to keep pace with them. At the time these investigations were made (May, 1906) the following list embraced practically all of the modern schools then established:

Government schools:

1. Arsenal School.
2. Military School or Academy.
3. Military Preparatory School.
4. Normal School.
   a Intermediate Normal School.
5. Literary High School.

Government secondary schools:

1. East Wall School.
2. West Wall School.
3. South Wall School.
4. North Wall School.
5. Min District Magistrate Higher School.
6. Wu District Magistrate Intermediate School.
7. Hai Fong Ting Elementary School.

Quasi-Government schools (established by educational societies with Government aid):

1. T'ien C'hü School (Milky Way School).
2. Lung Men School (Dragon Gate School).
3. P'ü Yü School (Disseminating Knowledge).
4. T'ien Ch'ing School (Heavenly Pure Dynasty).
5. Wen Tsao School (Elegant Style).
6. Ya Tao School (Beautiful Doctrine).
7. Ching Yeh School (Respectable Instruction).

Quasi-Government schools, etc.—Continued.

8. Lea Ch'ün School (Circle of Contentment).
9. Hsün Chih School (Humble Ambition).
10. Pan Chih School (Ambition).
11. Ju Wen School (Learned Scholar).
12. Ch'ung Cheng School (Lofty Uprightness).
13. Chi Ch'u School (Solid Foundation).
14. Ch'ing Wen School (Manchu School).
15. Tung Yeh School (East Village).
16. Liang Teng School (Second Grade).
17. P'u T'ung School (Universal Learning).

NOTE.—There are seven more in this class, making a total of twenty-four.

Private schools and schools supported by educational societies:

1. Wen Pi School (Learned Pencil).
2. P'u Wen School (Universal Learning).
3. Hsi Hu School (West Lake).
4. Hsi Ch'eng School (West Wall).
5. Tsü Chih School (Self-Governing).
6. Hsing Wen School (Ever-Increasing Learning).
7. French School.
8. Ts'ang Hsia School (Azure-Tinted Clouds).
9. Western Middle Grade Girls' School.
10. K'ai Chih School (Revealing Wisdom).
11. Nantai School.
12. Nantai Elementary School.

Special schools:

1. Reform School.
2. Police Training School.
3. Medical School.
4. School for the Study of Sericulture.

Those listed as Government schools are such as are established in response to instructions from the central Government authorities in Peking. I believe I am right in stating that the entire expense incurred in the establishment and maintenence of these schools is defrayed from provincial funds. Those listed as quasi-Government schools might better be termed gentry schools, or educational societies' schools, for these are established by various educational societies composed of the gentry, and receive certain financial support from the provincial authorities, not sufficient, however, to defray their entire running expenses. The third class comprise those which are entirely self-supporting, or receive their support in part or in whole from certain public-spirited individuals or societies.

It is an extremely difficult matter to secure enough reliable information in regard to these schools to be able to draw general conclusions in regard to them all as a class. I shall not attempt to describe each one in detail, but present such information as will assist in showing the tendency of this new educational movement.

GOVERNMENT SCHOOLS.

THE ARSENAL SCHOOL.

The oldest of the purely Chinese schools which pretend to give a training along western lines is the Arsenal School. It was established about thirty years ago by Viceroy Hsin Mao Hsin, who was somewhat ahead of his times in the progressive spirit displayed by him. This school was probably the first of western learning established in China. For many years the grandson of this famous viceroy presided over this school; in fact, it was only a few years ago that he relinquished control. Students are admitted by examination and by official recommendation, and I dare say a larger number are admitted by the latter method than by the former. There are about forty students enrolled in this institution. Their average age is sixteen. Their living expenses are defrayed by the Arsenal; in fact, they are under no expense themselves. There is no session of the school on Sundays. Among the subjects taught are French, English, Chinese, mathematics, mechanical drawing, and navigation. There is one foreign teacher who teaches French and mechanical drawing. The course of study embraces five years, at the completion of which the students are assigned to work on war vessels or in the arsenal factory. At one time this school ranked as a high class institution, but through the lack of the wholesome influence of competition it has gradually deteriorated and now is scarcely spoken of as a modern school.

MILITARY SCHOOL.

This institution is situated in the heart of the city on the premises once occupied by the governor's yamen or official residence. Since the abolition of the office of governor the property has been turned over for educational purposes. While the interior presents a mystic maze of court yards, compounds, old and new structures, detached and semidetached, yet every nook and corner from those in the residence of the official in charge to the stalls in the stables in which the cavalry ponies are kept are surprisingly clean. It is quite apparent that the administrative policy of this institution is dictated by the Japanese instructors who are retained by the provincial authorities. The Japanese are the direct antitheses of the Chinese in cleanliness and sanitation. With the exception of the main reception building, which is the residence of the Chinese official who is the nominal head of the institution, all of the buildings are old structures remodelled to serve as recitation rooms, gymnasium, and living rooms.

Students are admitted to this school upon examination and recommendation. As in the case of the arsenal school, recommendations are very useful to applicants for admission. A preparatory school, with an enrollment of about 80 students ranging from 14 to 18 years of age,

sends its graduates direct to this school, after a three-years' course. This school is, however, a school for Manchu boys only. The military school proper has an enrollment which is a variable quantity, for many students, for reasons unexplained, drop out before finishing the four-years' course prescribed by the school. Since its establishment four years ago, the number of students attending the school has fluctuated between 50 and 150. There are now about 125. These boys range from 18 to 25 years of age.

Dormitories are provided for the students at no expense to them; in fact, all expenses are defrayed by the provincial government. There are connected with this school seven Japanese instructors, with salaries ranging from $30 to $80 a month. The course of study is fashioned after that of a Japanese military school; in fact, the impression which a visitor to the school is bound to receive is that the whole institution is nothing more or less than a Japanese military school transplanted to Chinese soil. The subjects taught are military science, infantry and cavalry drill, fencing, wrestling, gymnastics, mathematics, geography, history, physiology, chemistry, physics, geology, English, Japanese, and Chinese. The students are clad in military costume, some with their hair cropped short and others wearing queues.

We had not much opportunity to witness the class-room work being done by the Japanese instructors, for our guide persisted in showing us through the beautifully cleaned stables and about the riding park and the gymnasium. We had the pleasure of witnessing a class in fencing and of seeing some of the gymnasium work, which was quite creditable.

This academy has the reputation of teaching the sciences very well, but its language work is said to be below the standard. Like all the modern Chinese schools in Foochow, it is yet in its experimental stage, and it would not be right to expect much in the way of perfection. It will require another four or five years for it to become properly established, and with proficient Japanese instructors and proper inducements for its graduates it should be able to do considerable in that time.

NORMAL SCHOOL.

In company with Ch'en Pao Ch'en, provincial director of schools, and Mr. Beard, secretary of the local Chinese Young Men's Christian Association, I visited the Fukien Provincial Normal School. This normal school really consists of a group of three schools, known as Shih Fan Hsüeh Tang. There are probably no schools among all the recently established schools for western learning in Foochow which receive more attention or more favorable comment than do these normal schools. It is well that it is thus, for there is no school which is more in demand at present than the normal school. It is the normal school which must make an effort to supply the dearth of properly

trained teachers for the lower schools. It is encouraging indeed that the Chinese recognize the necessity of opening up training schools for teachers for their new schools. The normal school proper has been established for four years. Perched upon the top and side of a hill, surrounded by spacious grounds dotted with beautiful banyan trees, and well away from the smells and noises of the crowded city, it has a site which is indeed well chosen. This institution is made up of a number of buildings, some of which are reconstructed temples, while others are newly built. The latter are constructed on the Japanese model, and are noticeably light and airy and neatly designed. There are twelve class rooms equipped with modern school furnishings, and laboratories for the study of chemistry, physics, botany, zoology, and geology. These latter are provided with cheaply constructed apparatus manufactured in Japan, so that it can not be said that they are well equipped; but, considering the fact that the school has been established only four years, it is a remarkably good beginning. Dormitories are provided to accommodate 250 students, each room containing four to eight beds. His excellency informed me that the central Government has instructed him to increase the accommodations so as to provide for 800 students, although he is left to discover for himself the ways and means of raising the funds necessary to defray the expenses of such an undertaking. The entire expenses of this school, including the students' board and lodging, are defrayed by the provincial government.

Students are admitted upon examination and upon the recommendation of the director of education to a three months' probation; if during this three months their work is up to the standard prescribed by the school they are allowed to continue, otherwise they are dropped. An effort is made to extend the privileges of admission throughout the whole Province, each prefecture and each district being entitled to send a certain number of applicants for admission.

The character of the entrance examinations is not clearly set forth, but I am given to understand that most of the students admitted are first and second degree Chinese graduates. No applicants are admitted who are under 18 or over 30 years of age. The regular prescribed course extends over four years, with a special post-graduate course, an intermediate course, and special lecture courses. Graduates are forbidden from entering upon teaching in any other than schools assigned to them by the provincial educational authorities, for a period of two years following their graduation. The Government pledges itself to place these graduates in schools immediately upon their completing their course, and if at the end of two years either party wishes to discontinue the terms of the agreement, it is at liberty to do so. Those who graduate from the full four years' course are to be placed as teachers in intermediate schools in the

Province; those who graduate from the special intermediate course are assigned to primary grade schools. The normal school proper will graduate its first class this coming winter, but it is said that many students left during the course to go to Japan and complete their studies there.

The course of study is comprised under two divisions, an elementary course and a higher course, as follows:

	Hours per week.
Elementary course (two years):	
First year—	
Arithmetic (through fractions)	6
Chinese (mandarin)	6
Japanese (spoken and written)	19
Gymnastics, including military drill	3
Total	34
Second year—	
Ethics	1
Pedagogy	2
History (Asia and China)	2
Geography (Asia and China)	2
Chinese literature	2
Natural sciences	2
Arithmetic (decimals to proportion)	4
Chinese (mandarin)	6
Japanese (grammar and composition)	6
English	2
Drawing, music, and gymnastics	5
Total	34
Higher course (two years):	
First year—	
Ethics	1
Pedagogy and history of education	4
History (Asia and China)	3
Geography (Asia and China)	3
Natural sciences	2
Arithmetic (proportion to series)	4
Political science	2
Chinese (mandarin)	2

	Hours. per week.
Higher course—Continued.	
First year—	
Japanese	4
English	2
Drawing	1
Music (theory)	1
Military gymnastics	3
Total	34
Second year—	
Ethics	1
School hygiene	2
Pedagogy	2
Universal history	3
Universal geography	3
Chinese	2
Natural science	2
Geometry	2
Algebra	2
Political economy (elementary)	2
Chinese literature	2
Japanese	4
English	2
Drawing (free-hand)	1
Drawing (mechanical)	1
Military gymnastics	3
Total	34
Special lecture course (one year):[a]	
Ethics	1
Pedagogy	2
History of education	2
School hygiene	1
General history	2
General geography	2
Mathematics	5
Military gymnastics	3
Total	19

[a] To those who do not understand Japanese these lectures are furnished in Chinese translations in pamphlet form, issued once each week, upon payment of publication price.

These courses of study are patterned after Japanese models; in fact, this school is under Japanese direction. There are four Japanese instructors; two are graduates of the Tokio Normal School and two are graduates of a Japanese law school. They receive from $50 to $75 a month each.

These courses are for the most part conducted in Japanese, necessitating the students' spending practically all of their time during the first year in the study of the Japanese language. One of the instructors is capable of conducting his recitations or lectures in mandarin, while in other cases Chinese with a knowledge of Japanese assist as interpreters. The regular Chinese teachers number ten. These are first and second degree men, several of whom have had some training in western methods. Their salaries range from $6 to $25 a month. The work in English is indeed of a poor quality, for the English teacher speaks so poorly that we were unable to understand him, yet he was making an effort to instruct twenty or more students in the rudiments of the language.

It was difficult to say just what this school was doing in science. The list of sciences embraced in its curriculum includes chemistry, physics, botany, zoology, mineralogy, geology, physiology, and astronomy. Considering the fact that the students entering this institution have had little or no previous training in science studies, it stands to reason that two hours a week divided between the subjects enumerated can do little better than give them extremely superficial ideas of these subjects in four years' time. The laboratories do not present the scenes of activity which such institutions generally do in American schools; in fact, it appears that the apparatus is used for lecture purposes only. We should not, however, be too severe in our criticism of the methods in vogue in this school, for one can easily appreciate the difficulties under which these Japanese instructors are forced to labor. Students enter this institution absolutely ignorant of the rudiments of arithmetic, geography, and the natural sciences, and these instructors, speaking a different language from their students, are supposed to mold these students into modern school-teachers in the short space of two or four years. The Chinese student is possessed of a splendidly receptive mind, and it is really surprising what he is able to accomplish in so short a time.

The text-books used in this school are all Japanese and Chinese productions. The library contains practically only Japanese works. Like the military school, the premises about this school are kept splendidly clean and neat appearing. The students are required to keep their rooms clean and in proper order. They are obliged to dress after a prescribed fashion, to undergo medical examination at stated periods, to bathe each Sunday and in general to conform to Japanese ideas of cleanliness so far as it is possible.

At the base of the hill upon which this normal school is situated there is a model primary school which is used as an experimental school for the students in pedagogy. This little primary school building is in magnificent contrast in point of sanitation and cleanliness with the old-type Chinese schoolroom. Classes here are assigned to different normal students in turn, with the idea in view of affording the instructors the opportunity of criticising the students' methods of class work. It has only recently been opened.

This normal school thus provides three distinct courses, namely: A full four-years course for preparing teachers for intermediate or grammar grade schools, a two-years course for preparing teachers for higher primary grade schools, and a one-year course for preparing teachers for lower primary grade schools. This institution finds it necessary to make an effort to turn out a maximum number of teachers in a minimum time, in order to start many of the newly established lower grade schools with teachers who have at least some idea of the methods of western education and are in sympathy with the introduction of these methods. It must also offer to those teachers already in the field an opportunity of adapting themselves to the changing conditions, lest these find themselves within a few years out of employment and with no other means by which to make a living. The regrettable feature in connection with this school, as with practically all of the larger newly established schools, is that the officials at the head are not western educated men and not in a position to appreciate the actual needs of the school.

THE LITERARY HIGH SCHOOL.

This school represents the first attempt on the part of the Chinese authorities in Foochow to establish a purely academic high school. This school is under the direct patronage of the provincial treasurer and receives its financial support from the provincial treasury. The school is located in a number of buildings, one half of which comprise a group of old temples and the other an old official residence. Many of the buildings are being replaced by more modern structures. A chemistry and a physics laboratory are now in course of erection, while two modern recitation rooms are planned for this fall.

As in most of the recently opened Chinese schools, board and lodging are furnished on the school premises; quite a number of students hold scholarships entitling them to free board and lodging, the ordinary charge for which is $1.25 a month. Tuition is free. The students in this school number about 200 and range from 14 to 25 years of age. They are admitted to the institution upon examination and upon graduation from certain of the intermediate schools. Upon graduation they are eligible to admission to the Imperial University at Peking.

This school retains three Japanese instructors; one as teacher in zoology, botany, and physics; one as teacher in history, and a third as instructor in military drill and gymnastics. A Chinese graduate of the Arsenal School is retained as teacher of French, while a graduate from the Anglo-Chinese College teaches English. A Chinese instructor in physics is doing remarkably good work. In his class room sat 45 students with notebooks and pencils, closely following his demonstration of the theory of equal pressures, which he illustrated by a piece of apparatus which he held in his hand. He spoke to his students in their own language. That he knew his subject is attested by the fact that he is a graduate of a London scientific school of high standing. The work of this man contrasted splendidly with that of a Japanese instructor in an adjoining room. This Japanese teacher was lecturing to a class of about the same size on a subject in physics. There was a decidedly noticeable lack of interest displayed by the class in the remarks of the lecturer. He was not addressing them in their own language, but in Japanese, while an interpreter translated, or seemingly translated, his remarks to the class. If the interpreter understood the subject sufficiently well to be able to convey to the class the exact meaning of the lecturer, he might better have taught the class himself. Although this Chinese instructor is doing much better or rather more effective work than the Japanese, yet the financial consideration which he receives from the provincial authorities is far less. The Japanese instructor is said to receive $75 a month, while the Chinese instructor must content himself with $25. In the clamor for things western there is bound to be good material at home which will fail to receive anything like proper recognition, especially so so long as those in authority are not themselves trained so as to appreciate the merits or demerits of these things.

The tendency on the part of the Japanese teachers in these schools seems to be to introduce the lecture method rather than the recitation method in all their teaching. In their eagerness to copy things foreign many of the grammar grade schools can exhibit to the spectator lecture rooms with elevated seats and auditorium effect. Whether or not the lecture method is peculiarly adapted to oriental boys I am not in a position to state, but I believe the missionary schools, the pioneers in western educational methods in China, find the recitation method far superior.

The high school seems to have a more clearly defined policy than any of the other recently established Chinese schools. It accepts graduates of certain preparatory schools, and its own graduates are eligible to enter the Imperial University in Peking or complete their education in other colleges. A goodly number of this school's graduates will undoubtedly go to Japan or abroad to complete their education. It can not be said that this school is yet on a solid working

basis; in fact, it will be some years before it will be able to establish anything like a stable policy. All of these schools are as ships at sea without rudders.

GOVERNMENT SECONDARY SCHOOLS.

These are intended to be preparatory to the high school and are what might be called grammar grade schools. Among the leading Government secondary schools we may class the East Wall, West Wall, South Wall, and North Wall schools, established by the Foochow prefect; the Min District School, established and supported by the Min District magistrate; Wu Kuan Elementary School, established and maintained by the Wu Kuan magistrate, and the Hai Fong Elementary School.

The first four of this group receive stipulated amounts each year from the Foochow prefect, besides exacting a small tuition charge of 20 cents a month. Each of these schools has an enrollment of about 50 boys, a number of whom board at the school, paying $1 extra for their board. Each school has 5 teachers, all of whom are Chinese and receive from $6 to $8 a month.

Late one afternoon we happened to drop into the East Wall School and found a number of boys in the courtyard doing "stunts" on a horizontal bar. They took great delight in exhibiting their gymnastic accomplishments, in a manner which would have undoubtedly shocked Confucius had he come to life suddenly in this temple yard. It is indeed fortunate for young China that there are so many beautiful temple sites available for school purposes. Most of these temples have spacious and well-shaded courtyards connected with them. These serve splendidly as drill and play grounds, especially so considering the fact that in the ordinary Chinese city there are no public parks or playgrounds, and the streets are for the most part so narrow, so congested, and so dirty that children can not utilize them as they would in western countries. There seems to be little or no hesitation on the part of the authorities in converting these temples into schoolhouses, so that one will find that the majority of these newly established schools occupy buildings and sites once reserved entirely for temple purposes.

The walls of the schoolrooms in this institution are covered with Japanese pictorial charts, maps, and bits of blackboard. Glancing over the text-books lying upon one of the desks, we found among them a geographical reader, a science reader, an elementary arithmetic, and a general reader, all in Chinese—quite in contrast to the Trimetrical Classic of a few years ago.

The Min District Magistrate School is one of the higher grade secondary schools, its boys being somewhat older than those found in many of the secondary schools. The Min magistrate pays $300 a year toward its support, this sum being probably taken from certain

court fines. This school occupies a temple on one side of the same hill upon which the normal school is situated. The buildings are in splendid shape, having been renovated and adapted to school purposes. The pride of the school is its lecture room, with its elevated seats. Both teachers and students seem to take a keen delight in exhibiting this feature of the school, much as a little girl might delight in displaying her new doll. At all events, it tends to show that public opinion in China is drifting away from the old antiquated institutions of the past.

There are five teachers in this school receiving from $6 to $8 a month; a teacher of English, who spends but an hour a day at the school, also receives this amount. The head master is somewhat better paid. The students pay a tuition fee of 30 cents a month, boarding students paying the usual extra amount. There are 80 boarding pupils and 20 day pupils, ages ranging from 12 to 17. As in most of the schools, these boys dress in semimilitary costume, with short coats, caps, and stripes. We were treated to a gymnastic exhibition at this school also, one of the little fellows taking considerable delight in practicing his newly acquired English in his efforts to explain the various gymnastic exercises to us.

QUASI-GOVERNMENT SCHOOLS.

These are schools established by various public-spirited educational societies. The provincial authorities assist in the support of these schools by allotting them sums ranging from $100 to $290 a year. As the list above given shows, there are about 25 in this class, many of which have been only recently opened. They may be classed as intermediate-grade schools. The teachers are, with but few exceptions, Chinese, and receive $4 and $5 a month and board. The students range from 9 to 16 years of age, and for the most part dress in costume fashioned after those worn in the higher schools. Most of these schools have military drill, physical culture, and gymnastics. The courses of study are all supposed to be patterned after the western model, most of the schools teaching arithmetic, geography, history, and such science as one might find in the elementary science readers.

Numbers 7, 8, and 9, as set forth in the list on pages 201–2, are provided with teachers who have graduated from the elementary normal course in the normal school. Volunteer teachers from the normal school and from the high school embrace the opportunities afforded by these schools to devote a certain number of hours each week to teaching classes in them, simply to get experience in teaching. Some of these schools remain open on Sunday in order to secure the services of some of the volunteer teachers, who might be employed in study the rest of the week; but remaining open on Sunday means

that they close on Saturday or on Monday, for all of these schools recognize the necessity of one day's rest in seven, something which the old Chinese school took no cognizance of.

Number 14, the Ch'ing Wen School, is an institution open to Manchu children only. There are in Foochow about 8,000 Manchus, who at one time made up what was known as a Manchu garrison. This school is well supported and its equipments are quite modern. It provides a four-years' elementary course. The day we visited the school we found one of the lads poring over a lesson, which proved to be a translation of the story of George Washington and the cherry-tree incident, profusely illustrated. The preceptor in charge of the school proudly directed our attention to a row of dumb-bells suspended in brackets on a wall on one side of the room.

Number 17, P'u T'ung School, carries a student enrollment of 120 boys. It is located upon a hill overlooking the old examination halls, in a building which once served as sleeping quarters for students who came to Foochow as candidates for their first and second degrees, under the old régime. One of the rooms, which is now utilized as a modern recitation room, has the reputation of having housed a famous graduate during his sojourn in Foochow as a candidate. As we stood in the courtyard of this school, watching a Japanese instructor put a class of uniformed boys through a "snappy" half hour of military drill and dumb-bell exercises, we could not but be impressed by the contrast between the new education as represented by the methods now in vogue in this school and the old education as represented by the dull, gray-tiled, dirty examination halls (or cells) which lie stretched out below us, to the number of 20,000 or more, in a state of decay. These examination halls are soon to be replaced by a modern high school.

The Japanese drillmaster also teaches Japanese in this school, devoting in all six hours' instruction to this institution, for which he is paid $100 a year. A graduate from the Anglo-Chinese College is retained as instructor in English for one hour a day, and receives $60 a year. A class in physics which we visited was working on mimeographed lesson sheets. The instructor, a Chinese, informed us that he found the text-books too far advanced for his class, so he worked out the lessons in simplified form, and furnished the results of his labors to the class in mimeograph copies made by him. A class in reading had before them the ten commandments. A class in geography was discussing the geography of Africa. There is very little about this school which smacks of the Chinese classics, or of the old traditions so closely associated with the spot upon which it stands.

Number 16, the Liang Teng, or second-grade school, is an intermediate school considerably smaller than the one just described, but quite along the same line. It occupies the premises of an old

Buddhist monastery. Its students number 70 and its teachers 7. Mr. Ding, a young man 23 years of age, a graduate of Foochow College and a student in the Literary High School, devotes his spare time to teaching in and planning the policy of this school. In this old Buddhist monastery, grouped about dusty, time-worn Buddhas, now literally buried under pictorial charts and maps, sat Mr. Ding's class in arithmetic. The surroundings were not such as one could describe as being particularly favorable to the study of things modern, yet Mr. Ding shows by his work that it is not buildings and equipments which make schools, but teachers. It was indeed good to note the enthusiasm of this youthful instructor, and the ready response which it met with from his pupils. Completing his arithmetic recitation, he took us into the courtyard, where he lined up 18 youngsters for military drill. These lads, ranging from 10 to 14 years of age, were clad in smart, semiforeign military costume, short coats, tight-fitting trousers, caps, and belts. Mr. Ding put them through a series of marching exercises without arms. As the fours came around into company formation and the line marched to the front in true German parade style, it certainly presented a military bearing. The setting-up exercises were executed with a snap and precision which might well have put to shame some of the work done by freshmen in our State universities. This juvenile company was then dismissed, to fall in again with wooden rifles. The manual of arms was splendidly executed, the guns going up and coming down with clock-like precision, there being no stragglers. Mr. Ding informed us that there were quite a number of high school pupils engaged in volunteer teaching such as he was engaged in doing. He expects to complete his education in Peking or in Japan, and to return to Foochow as a teacher.

PRIVATE SCHOOLS AND SCHOOLS SUPPORTED BY PATRONS.

These are schools which receive no assistance from the provincial authorities. They are supported by patrons, by educational societies, and by tuition fees. There is considerable philanthropy shown by the Chinese in matters pertaining to education. That inborn respect for learning, which all Chinese seem to possess, undoubtedly accounts for much of the interest displayed by the more influential Chinese in the establishment of schools. Establishing schools for the education of the youth is a popular way of "storing up" merit. At present there is considerable merit being stored up, if the number of newly established schools is to serve as a criterion. Foochow is peculiarly well able to stand a good bit of this sort of storing up merit. The last annual customs return of trade shows the largest single item in the trade of Foochow to be opium. Twenty years ago tea was Foochow's principal article of commerce. Exports of tea

tended to enrich the country, but imports of opium not only impoverish the country, but demoralize its people as well. One often hears the Foochow people spoken of now as the laziest people in China. This may be an unjust imputation; at any event, Foochow city is one of the dirtiest in China. It is well indeed that these people are displaying an interest in education.

In many cases those who contribute to the financial support of these schools also devote much of their time and energy to looking after the interests of one or more schools. This is the case with the Hsing Wen School. Mr. Chao, the patron of this school, lives on the school premises, an old temple near the Foochow College. Discovering our interest in school matters, Mr. Chao showed us into the courtyard, where there was erected considerable gymnastic apparatus. He had filled the yard with loose sand to afford the boys plenty of soft spots upon which to tumble. As we were standing there, a number of boys, with the alertness and energy of monkeys, climbed about the various pieces of apparatus, and proceeded to do "stunts." One of them, in doing what boys usually call the "muscle grinder," got his queue badly entangled about the bar. Mr. Chao suggested that it would not be long before they all cut off their queues. In a corner of the yard several coolies were digging a ditch. Mr. Chao explained that he was trying to teach the boys to jump, and as they wear the edges of the ditch down it becomes wider, hence their ability to jump must increase as the width of the ditch increases. This little incident is mentioned only to show how one trained under the old régime, which took no cognizance of physical education, may change and become an enthusiastic supporter of the new idea.

A peep into the improvised schoolroom revealed a gorgeous display of highly colored chart and maps. Upon the desk in one of the rooms stood bits of laboratory apparatus. This school cares for 20 day scholars and 25 boarders, the former paying 25 cents a month and the latter $1.50.

Number 2, the P'u Wen School, is one of the best of this class. It is located in a temple, the court yards of which are particularly pleasant because of the large banyan trees which shade it and give to the premises a delightful air of quietness. Two of the teachers in this institution are Chinese who have studied in Japan. There are 40 pupils, all of whom live at the school. There are no tuition charges, the school being well supported. It presents a prosperous and neat appearance.

Number 4, West Wall School, has a splendid location, inside the west gate of the city. Its grounds are spacious, being well adapted to military drill, which forms an important feature of this school. It accommodates 120 boys, 40 of whom are boarders. There are no charges for tuition. The premises are furnished free. The running

expenses of this school are estimated at $65 a month, which is little more than the amount paid out for its teachers' salaries, there being 10 teachers.

Number 5, Tsu Chih School, is better furnished than any other of this class. Besides a tuition charge of 50 cents a month, it receives subscriptions from private sources aggregating $600 a year. It has a student enrollment of 60 boys and retains 8 teachers. Appended hereto is a translation of the rules and regulations governing this school. These may be interesting as showing the general character of the rules and regulations which govern most of the schools of this grade.

Number 6, French School, teaches little else than French and Chinese. Its teacher is a graduate of the Arsenal School.

Number 9, Middle Grade Western School for Girls, is an interesting institution, being the only one in this long list of newly established schools which provides for the education of girls. The education of Chinese girls in Foochow is confined almost entirely to the missionary schools, the Chinese having not yet reached that point where they see the necessity of doing much for the education of women. The school referred to has an attendance of 50 girls. As to the character of its work it is of very mediocre quality.

Number 10, K'ai Chih School. The only distinguishing feature in connection with this school, which is located in the southern suburbs of the city, is that a class in Japanese is taught by pupils from the normal school.

Number 11, Nantai School. This school is maintained by the "I Wen Educational Society," the members of which subscribe a certain amount toward the society and its educational work. The greater part of the funds disbursed by this society for educational purposes is subscribed by foreign and Chinese firms doing business in Foochow. The society maintains a library and reading rooms in its school for the use of the members. The school is a combined primary and intermediate grade school, the ages of its 100 pupils ranging from 9 to 18 years. Tuition for the intermediate course is 40 cents a month, and for the primary grade course 20 cents a month. The primary school is devoted to Chinese branches, giving most of its time to Chinese language study. The intermediate course embraces geography, history, arithmetic, elementary science, English, and Chinese. A special teacher is retained for military drill and gymnastics. The work done by this school is indeed of a high order.

Number 8, Ts'ang Hsia School, deserves particular notice. It is entirely self-supporting. It is located upon the same hill as the Normal School. It was established in 1897 by Mr. Hou, the present head master. It might better be called an Anglo-Chinese school, for it is here that English is taught better than in any of the purely

Chinese schools in Foochow. Not only is English well taught, but Chinese as well. Mr. Hou is a graduate of the Anglo-Chinese College. He speaks English perfectly, and is rated the best Chinese teacher of English in Foochow. His teacher in mathematics is a graduate of Foochow College, while his head Chinese teacher is a second degree man of excellent scholarship.

The subjects taught comprise English, Chinese, geography, history, mathematics, reading, elementary science, and political economy. The text-books are the publications of various mission presses. The students here number 70 and live upon the school premises. Mr. Hou says he finds it a difficult matter to get the pupils to give sufficient of their time to the study of Chinese, for they seem to have an idea that the study of English is far more important. They think that English is a sort of open sesame to all the wonders of things western.

The following items may be of interest as showing the yearly expenses and receipts connected with running a school of this kind economically managed:

Rent for quarters	$60
Teachers' salaries (6)	400
Board and lodging (68 pupils, 6 teachers)	800
Other expenses	60
Total expenses	1,320
Receipts:	
Tuition (68 pupils)	680
Board and lodging (68 pupils)	952
Total receipts	1,632
Head master's recompense	312

It is a difficult matter to secure accurate information in regard to matters of this nature, but I believe this to be a fairly accurate statement, under an economical administration. The boys sleep four in a room, in rooms capable of holding no more than four narrow beds. The Chinese are not accustomed to the amount of cubic air space which foreigners demand; moreover, Chinese houses are open winter and summer, the Chinese dressing according to the weather. The board provided in this school is the regulation rice diet.

SPECIAL SCHOOLS.

The reform school mentioned under this head in the list before given is not a modern institution, although it pretends to be. The boys who are so unfortunate as to be confined in that school find themselves turned loose in a dirty, dingy set of temple buildings, filled with grim-visaged old images. The inmates of these cheerless quarters are set to weaving coarse cloth on hand looms. These

quarters are undoubtedly better than the ordinary Chinese jail, but the boys confined here are not all supposed to be criminals, for parents are privileged to send incorrigible youngsters here for correction.

POLICE TRAINING SCHOOL.

This school is to be opened this fall under Japanese supervision. It is supported by the provincial judge, who is responsible for its administration. Already 6,000 applicants have applied for admission. Of this number, 100 have been accepted after having passed the prescribed physical examination. There are to be two classes, one giving a ten-months' course and the other a twenty-months' course. The work is to be fashioned after that of similar institutions in Japan. The graduates are to be utilized in the Foochow police department, where trained police captains and sergeants are certainly much in need.

MEDICAL SCHOOL.

There is so much mystery connected with the establishment of this school that it is difficult to say just what it proposes to do. It will be an interesting venture on the part of the Chinese.

SCHOOL FOR THE STUDY OF SERICULTURE.

This is a Government school and is a fairly proficient institution. It is in this school that the rearing of the silkworm, the cultivation of the mulberry, and the weaving of silk are taught. There is here a Japanese instructor, who is supposed to be teaching the rearing of silkworms after the Japanese methods. The course embraces a period of two years, and includes the study of arithmetic, Chinese, elements of agriculture, anatomy of the silkworm, breeding of silkworms, care of silkworms, cultivation of the mulberry, meteorology, and manufacture of silk. There is to be connected with this school an experimental school with a course covering one year. Several Cantonese silk growers have been engaged to work in conjunction with this institution. Education in the natural sciences has been so badly neglected in China that it will be some years before industrial schools of this sort can do really effective work.

CONCLUSIONS.

Undoubtedly the most noteworthy tendency in this new educational movement is the military spirit which predominates over all. It seems to indicate that the new China is to be a military China. It is a spirit which one finds difficult to reconcile with the Chinese character, for the China of the past has shown little military spirit; in fact, the Chinese social system placed the soldier in a class with butchers, executioners, actors, barbers, etc. People regarded soldiers with so much contempt as to forbid them or their childrens' children

from taking the literary examinations. Moreover, the individual Chinese does not seem to possess that element called "fight" which is possessed by other peoples.

Added to this newly developed military spirit is the keen interest exhibited in gymnastics and physical training.

In the clamor for western schools there is a very noticeable mistaking of symbols for the things which these represent. Schools are piled full of highly colored charts and laboratory apparatus of all descriptions, and these are exhibited as western education itself, instead of the tools which they really are. It will undoubtedly be some time before they learn to assign these to their proper places, and to appreciate the fact that buildings and apparatus can not make schools, that teachers make schools, if schools are to be worthy of the name.

One of the beneficent results of the introduction of western learning into Chinese schools is the recognition of one day in seven as a day of rest. Every one of the new schools enumerated in the above list observes one day in seven as a day of rest, an entirely new departure from the old régime. An equally beneficent result is the prevalence of a degree of cleanliness unknown to the old Chinese school, or in fact to things Chinese in general.

Another fact worthy of note is the readiness with which temple structures are given up for school purposes. Most of these temples have been in a state of decay for some years, but the present movement does not seem to betoken a resurrection of the ideas for which they once stood.

Although these schools are groping about in the dark, trying to feel their way, and although there is much superficiality about their methods and instruction, yet they are on the right track, and they are bound to have an uplifting influence in the future of Foochow and of China.

RULES AND REGULATIONS GOVERNING THE TSÜ CHIH SCHOOL.[a]

I. The purpose of this school is to train boys and to give them a thorough general education.

II. These rules are in accordance with those prescribed by the educational department of this province under sanction of the Throne.

III. *Classification of courses.*—SECTION 1. The courses in this school are to consist of a main and a preparatory course.

SEC. 2. The main course is divided into two classes, *a* and *b*.

SEC. 3. The preparatory course may be completed in one year, after which students may enter upon the main course.

SEC. 4. Ages of students: (*a*) The main course shall be open to students between the ages of 15 and 18. (*b*) The preparatory course shall be open to students between 8 and 14 years of age.

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[a] See p. 215.

SEC. 5. The courses of study are divided into compulsory studies and elective studies. (*a*) Compulsory subjects are ethics, reading, Chinese language, Chinese classics, Chinese geography, Chinese and foreign history, arithmetic, science, English, drawing, singing, and gymnastics. (*b*) Elective subjects are economics, law, and industrial arts.

SEC. 6. The schedules of recitations are as follows:

Class "a," main course.

	Hours a week.		Hours a week.
Ethics	1	Science	2
Chinese reading	3	English	6
Chinese language	2	Gymnastics	3
Chinese composition	6	Drawing	1
Chinese geography	2	Music, singing	1
Chinese and foreign history	3		
Arithmetic	3	Total	33

Class "b," main course; same as class "a," preparatory course.

	Hours a week.		Hours a week.
Ethics	6	Science	1
Chinese language	2	Drawing	1
Chinese reading and composition	12	Singing	1
Chinese history	2	Gymnastics	3
Chinese geography	2		
Arithmetic	3	Total	33

IV. *Various rules.*—SECTION 1. Students must live in the dormitories provided by the school.

SEC. 2. When a pupil breaks any of the rules of the school he shall be subject to the following code of punishments: (*a*) Reprimand. (*b*) Deduction of marks from study report. (*c*) Recording marks against him. (*d*) Dismissal.

SEC. 3. Rules for the class rooms.

SEC. 4. Rules for pupils' rooms.

SEC. 5. Dormitory rules.

SEC. 6. Waiting-room rules.

SEC. 7. Rules for athletic grounds.

SEC. 8. Dining-room rules.

SEC. 9. Rules for the school gate.

V. *Rewards and Punishments.*—SECTION 1. Every pupil is obliged to obey the rules established by the school and to study diligently. If for a period of three months he receives no demerits, he shall be awarded a credit mark. If he receives no demerits during a whole year, he shall be awarded a special prize.

SEC. 2. When a boy breaks a rule he shall be punished as provided in Paragraph IV, section 2.

VI. *Rules regarding the Observance of Ceremonies.*

VII. *Holidays and Leave of Absence.*—SECTION 1. The following days shall be observed by the school as holidays: (*a*) The Emperor's and the Empress Dowager's Birthdays. (*b*) Anniversary of Confucius's Birthday. (*c*) Various Chinese holidays: Dragon Festival, Festival to the Dead, Winter Solstice, and Fifth Day of the Fifth Moon. (*d*) Sunday of each week. (*e*) Summer and New Year's vacations, as by notice.

SEC. 2. Leave of absence: (*a*) Sickness; must have permission from the monitor. (*b*) Pupil must have card from the monitor in order to leave school at any time. (*c*) In

the daytime pupil not to be allowed leave for more than two hours a day, and such leave to be granted but once a week. (*d*) Pupils playing truant shall be punished.

VIII. *Expenses, Tuition, etc.*—SECTION 1. Tuition shall be $5 a year, payable in half-yearly installments.

SEC. 2. Board and lodging shall be provided at $1.30 a month, $0.20 extra being added for tea, water, oil, etc., payable upon the first day of each month.

SEC. 3. Pupils are requested to supply such special clothing, caps, etc., as may be designated by the school; also to furnish their own bedding, books, and stationery.

IX. *Examinations.*—SECTION 1. Each teacher must keep a class record book.

SEC. 2. The mark "100" to indicate perfect; the mark "60" to indicate passed. A pupil not receiving 60 in any subject shall be dropped in that subject.

SEC. 3. A monthly record of the standings of the pupils to be posted at the beginning of each month.

SEC. 4. The school year shall be divided into two terms: (*a*) First term, New Year's to summer vacation. (*b*) Second term, autumn to end of year. At the end of each term the school shall request the educational department to send a deputy to examine the various classes.

SEC. 5. Examinations are to be held by the teachers once every two months, after which rewards and punishments shall be given out as principal sees fit.

SEC. 6. At the end of each year a report is to be sent to the parents of the pupils, setting forth the pupils' standings in class.

X. *Officers and Teachers.*—SECTION 1. It shall be the duty of the principal to look after all the affairs of the school.

SEC. 2. One teacher shall sleep in each dormitory and act as monitor for the boys in that dormitory.

SEC. 3. Teachers employed by the school are to remain in the school at all times during the sessions of the school.

SEC. 4. The finances of the school shall be handled by a treasurer appointed by the school.

XI. *Graduation and Promotions.*—SECTION 1. The first class of the principal or main course is to be promoted after three years of study; the second class after the fourth year.

SEC. 2. Those successfully completing the four years thus prescribed shall be examined by the provincial board of education. If they pass this examination successfully, they shall be deemed as having graduated from an official Government school.

Remarks.—The principal and faculty are requested to make such changes in these rules and regulations as they may deem necessary in order to obviate any difficulties which may arise therefrom.

CHAPTER VII.

EDUCATION IN CANADA.[a]

Dominion of Canada, comprising nine provinces and "the territories," with an area of 3,745,574 square miles and a population of 5,371,515 (census 1901).

TOPICAL OUTLINE.

Summarized statistics of public schools—Principal features of the provincial systems of public education—Recent changes in the Ontario system—The Macdonald movement—Provision for higher education.

The following table summarizes the principal statistics of public schools (elementary and higher) in Canada for the latest year covered by official reports.

Statistics of public schools in Canada.

Province.	Year.	Pupils.			Teachers.			Expenditure.
		Boys.	Girls.	Total.	Men.	Women.	Total.	
Ontario	1905	.....	.....	446,494	1,950	7,699	9,649	$6,161,239
Quebec	1905-6	166,967	174,841	341,808	9,783	1,421	11,204	2,591,657
Nova Scotia	1906	.....	.....	100,332	366	2,212	2,578	1,073,720
New Brunswick	1906	.....	.....	60,681	.....	.....	1,879	.....
Manitoba	1904	.....	.....	60,432	.....	.....	2,240	1,786,311
British Columbia	1906	14,524	13,998	28,522	.....	.....	690	720,281
Prince Edward Island	1905	10,427	8,845	19,272	.....	.....	570	168,592
Northwest Territories[a]	1903	.....	.....	33,191	.....	.....	1,152	213,764

[a] The provinces of Alberta and Saskatchewan, formerly included in the Northwest Territories, were admitted to the Union as provinces by Federal acts of 1905.

PRINCIPAL FEATURES OF THE SYSTEMS OF PUBLIC INSTRUCTION IN THE SEVERAL PROVINCES.

By the British North American act of 1867 the right to legislate on matters respecting education was left to the governments of the four provinces (Ontario, Quebec, Nova Scotia, and New Brunswick) which were then united under the general name of Dominion of Canada. The same right has been assured also to the provinces that have since entered the confederation (Prince Edward Island, Manitoba, British Columbia, and Northwest Territories).

[a] For index to previous articles on education in Canada, see Report of the Commissioner for 1906, Vol. I, chap. 1, p. 1.

The first system of public education organized in the provinces, that of Ontario, was distinctively a system under public or government control, and as such has been the model followed more or less closely by all the other provinces excepting Quebec.

The minister of public instruction in Ontario is more than the executive head of the system. As a member of the legislature he initiates and largely directs school legislation, while his judicial functions and powers of appointment give great weight to the policies he advocates. No other province has reposed equal authority in the chief officer of education, but all have sought to secure uniformity of school provision and educational standards by means of centralized government control.

In Quebec the schools are sectarian; that is, they are distinctively either Roman Catholic or Protestant schools. The former are under ecclesiastical control, which for this purpose is organized in accordance with the provisions of the school laws; the Protestant schools are in like manner under Protestant control. In Ontario and the Northwest Territories provision is made for separate schools for Protestants and for Catholics, where desired, and the supporters of these separate schools are exempt from the payment of local taxes for the support of the public schools. The separate schools are under government inspection and, in general, are under the same regulations as the public schools.

The public elementary schools are free schools, excepting in Quebec, where fees are charged which may not exceed 50 cents a month nor be less than 5 cents a month. In the model schools and academies of this province, which correspond to the grammar and high schools of our own States, the fees may be higher. In the high schools of Ontario fees are charged, but may be and often are remitted at the discretion of the school authorities. With these exceptions the public schools of the several provinces are free, their support being derived from provincial grants and local (municipal) appropriations and school taxes.

The mode of apportioning the legislative grant among the school districts differs in the different provinces, but in all there is apparent the purpose to make the provincial appropriation a means of stimulating rather than of lessening local effort in behalf of the schools.

In Ontario the legislative grant is apportioned to the schools on the basis of average attendance in each. In Quebec the legislative grant is apportioned to the several school municipalities (areas for local school administration) in proportion to their respective populations, upon proof that they have complied with the law as to the maintenance of schools and the qualifications and remuneration of teachers. Special arrangements are made in the case of very poor municipalities. In Nova Scotia the legislative grant for public schools

is a fixed sum ($190,000 annually), divided between the legally qualified teachers in combined proportion of the number of "authorized days taught" and the class of license held by the teacher.

In Manitoba each municipality is required to appropriate a specified amount ($20 for each teacher employed for each month the school is kept open) in addition to a variable amount, depending upon the current expenditure for the schools.

The need of some regulation proportioning the provincial grant to the amount raised locally is recognized in New Brunswick; complaint is made that some districts seem content to leave their schools to the meager provision from the legislative grant, although fully able to bear a part in their financial support.

In all the provinces the public school systems include secondary schools corresponding to the high schools of our own country. These high schools have generally an extended curriculum and prepare students for matriculation in the universities.

CHANGES IN THE ONTARIO SYSTEM.

The system of public education in Ontario, which has attracted widespread attention by reason of its organization and efficiency, has recently entered upon a period of reconstruction.

The following citations from the latest report of the minister of public instruction, covering the year 1906, set forth the purpose of the changes thus effected.

REASONS FOR THE CHANGES.

Owing to various causes, some of them incident to the increase and displacement of population in certain parts of the country affecting the schools and the supply of teachers, others the consequence of the greater cost of providing adequate facilities in both higher and primary education, it was judged well to seek from the legislature measures to modify in several important respects (1) the powers of administration exercised by the department, (2) the basis of pecuniary support for the rural public schools, and (3) the system of control over the State university. There was involved in these proposals a considerable increase in the votes granted for purposes of education. It affords me great satisfaction to acknowledge the intelligence and generosity displayed by all parties in the legislature in relation to these matters, and to record the gratifying proofs of interest and enthusiasm evinced by many, both within and outside the legislature, in the reform and improvement of our educational systems. * * *

RURAL SCHOOLS.

The amendments to the public schools act passed at the last session of the legislature were designed to meet the needs of these schools. The first duty was to provide larger pecuniary support. The legislative grant was increased, as well as the grants by the municipal authorities. The legislative grant for the rural schools was thus increased to $180,000, an amount by no means in proportion to the wealth and importance of a Province like Ontario, but considered to be a fair starting point. It was designed that

this larger pecuniary support should be devoted, first, to the payment of higher salaries to teachers, and to provide improved equipment in the schools. The attainment of these objects, as a prime consideration in educational policy, has met with general approval. The salaries of teachers in rural schools had become insufficient to induce young men and women to enter the teaching profession and to incur the expense of higher professional training where the compensatory advantages were so slight. The rapid settlement of the western provinces of Canada has also drawn away a considerable number of our experienced teachers. The salaries offered in the West were much in excess of the scale in Ontario, so that the department of education, in order to keep our own schools open, felt itself obliged to issue a greater number of temporary certificates than concern for the welfare of the schools could justify, provided such a condition were to last for any length of time. The objects sought by the legislation of last season should, therefore, be regarded as a principle from which a backward step must not be taken. * * * Hand in hand with increased compensation to teachers goes higher training, and for this purpose it is proposed to substitute normal school for model school training. The excellent work done in some of the model schools is encouraging, but it is felt that to secure more efficient teaching the extension and modification of normal school training is in accord with what is being done in other countries and will meet satisfactorily the conditions in Ontario. The addition of four new normal schools to the three already in existence will, it is believed, provide for the present the necessary number of teachers. The additional normal schools will be so situated as to serve conveniently the various parts of the Province, and also to provide the required practice teaching in public schools of a successful character.

Another departure in professional training which also places Ontario abreast of what is being done abroad is the creation of a faculty of education in the State university of the Province to carry on the work hitherto conducted in the normal college, but on lines more thorough and complete than any institution without the resources of a well-equipped university could be expected to develop. The appointment of a professor of education has been made by the governors of the university, and pending the creation by the university of model, high, and public schools under university control, the use of city schools for practice and observation purposes will be sought and I trust secured.

THE ADVISORY COUNCIL AND THE SUPERINTENDENT OF EDUCATION.

The recent choice of members to form the first elective advisory council of education marks another step in the reorganization of the system. By this a body representative of the various classes of educationists has been called into existence. The creation of the advisory council has long been discussed as a practical method for bringing the minister of education in close touch with the teaching profession and enabling him, whenever he desires, to seek in a regular and systematic manner the counsel and opinions of the various ranks of educationists. The council is elected triennially, and upon it are represented the universities, the high schools, the public schools and the separate schools, and the inspectors, while two of its members are school trustees. In creating this body the legislature has carefully guarded the responsibility of the minister, who is not to divide or evade his duties to the legislature or the public, but is to continue responsible, as before, for the legislation and administration pertaining to education. The council will be consulted from time to time on matters concerning which I feel that the advice of professional educationists will be helpful to the public advantage. My representative upon the council and the medium of official communications is the superintendent of education. Concerning this office and its present occupant a word should be said. The appointment of a superintendent, authorized by the act of last session, is in harmony with the principle which underlies the present reconstruction of the educational system and is intended to afford

the department the constant assistance of professional experience and knowledge dissociated from the full administrative control which remains in the hands of the responsible minister. The functions of the office of superintendent being advisory and not executive, are exercised primarily with a view to the educational bearing of all questions submitted to him. The abstract merits of all educational problems thus receive due consideration.[a] * * *

THE UNIVERSITY ACT.

The year will also be memorable for the passage of the university act, based on the report of a royal commission appointed the previous year.[b] * * * The report of the commission, which sat for several months and personally investigated the workings of the university constitutions of the United States, was accompanied by a draft bill. This, with certain modifications, was accepted as the basis of the legislation and was adopted unanimously by the legislature. It vested the supreme control of the State university in a board of twenty governors nominated by the Crown, assigned to the institution an annual income equal to half the revenue received by the Province from succession dues, increased the powers of the president of the university, who becomes ex officio a member of the governing board, and made such changes in the executive machinery as will, it is believed, greatly conduce to the welfare and efficiency of this great State institution. The measure also transferred the control of the School of Practical Science from the department of education to the board of governors of the university, thus severing a connection which had lasted for more than thirty years. In heartily approving of this important change I did so with the conviction that the incorporation of the school in the university, of which it is now the faculty of applied science, would greatly conduce to the welfare of both institutions. As a sharer in the enhanced income conferred upon the university by the legislature, the school will be better able to perform those services for technical education now so earnestly desired by the people of Ontario. In the recommendations of the commission on this head I concur, since the development of technical instruction in the schools of the Province calls for an effort not hitherto put forth if we are to keep pace, as an industrial community, with the training supplied to the youths of other countries. * * *

MOVEMENTS FOSTERED BY THE MACDONALD FUND IN CANADA.

The Macdonald movement, which pertains to both manual training and rural education, affects every province of Canada, and has attracted attention wherever education is a matter of public interest. The main features of the system, as it may properly be termed, are described in the following extracts from an account given by Doctor Robertson, who from the first has had the practical direction of the work.[c]

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[a] The first incumbent of this office is Dr. John Sheate, who has long been identified with the school system.

[b] The chairman of this commission was Mr. Jos. W. Flavelle, and Dr. Goldwin Smith was one of the four additional members.

[c] The Macdonald Movement for Rural Education. Evidence of James W. Robertson, LL. D., C. M. G., principal Macdonald College, before the standing committee on agriculture and colonization, 1906–7. Printed by order of Parliament.

A brief account of this movement has already been given in a publication of this office: Agricultural education, etc. Bulletin No. 2, 1907.

MANUAL TRAINING CENTERS.

Sir William C. Macdonald furnished funds to establish manual training centers in connection with the public schools in 21 places from Prince Edward Island to British Columbia, and to maintain them without cost to the pupils or the public for a period, in most cases, of three years. At first special teachers of ability and experience were brought in from outside, mostly from England. Some 27 manual training teachers were thus brought into Canada. As time went on Canadian teachers were trained and became duly qualified. Before the end of the period of maintenance by the Macdonald fund, there were 45 manual training teachers on the salary roll at a cost of some $3,600 per month, and more than 7,000 boys were taking the courses. Summer courses were provided for teachers of urban and rural schools. In the cities on Saturday forenoons, or at some other convenient time every week, classes were arranged for the teachers from whose rooms the boys went to the manual training centers. In Ottawa these classes were attended by over 90 teachers, and in Montreal and in Toronto by over 100 in each place. This work was begun seven years ago, and in 1903 (in Montreal in 1904) the local authorities in the several provinces took over and extended the work. The equipment was presented free to the school boards, and in the case of the normal schools to the provincial governments. Now over 20,000 boys and girls in Canadian schools receive the benefits of manual training in their regular course under the school authorities as a result of Sir William's benefaction in giving that form of industrial and agricultural education a good friendly lift.

I cite the following from a former report I made to indicate the true character of manual training lest some one should suppose that its purpose was to make carpenters or young men skilled in woodwork, admirable as these two forms of ability are in themselves. "Manual training develops in children habits of industry, and leads them thoughtfully to adjust their acts to desired ends. It begets a sense of responsibility, in response to which the child rises to the exercise of its powers in sustained efforts suited to its strength and intelligence. It brings about the mental habit of appreciating good work for its own sake, and is quite different from that sort of education which consists in informing the pupils about the facts within a definite area of knowledge in order that they may be able to pass examinations on the subjects included within it. The so-called dull boys, who are not quick at book studies, have in many cases been found to show great aptness in the manual training part of education. It prevents them from being discouraged with school life, and from feeling any sense of inferiority to the quick children. It gives them habits of carefulness and makes them self-reliant, hopeful, and courageous. All of these are manifestly most desirable educational results. It is also a soothing and strengthening corrective to the quick and excitable children who become overanxious about examinations on book subjects."

"The glow of satisfaction from having done something well with one's own hands has certain stimulating and strengthening effects. Is it not the same as that which is revealed by the sacred historian when he wrote 'And God saw everything that He had made, and, behold, it was very good.' It is a good thing to let boys and girls become partakers of this divine joy in their own work. The happiness which springs from the consciousness of having begun and finished a piece of good, useful work by one's own labor, is more than a mental and physical tonic. In large measure it allies the worker with the Power that maketh for righteousness. It gives power to overcome obstacles, and the power to overcome obstacles in the path of material, mental, moral, and spiritual progress is perhaps the most desirable quality which can be acquired through education. 'Train up a child in the way he should go, and when he is old he will not depart from it.'"

SEED GRAIN PRIZES.

Out of the Macdonald manual training fund came the Macdonald seed grain competition carried on by boys on farms dotted all over Canada from the Atlantic to the Pacific. The main purpose of this movement was to improve the crops of Canada by encouraging the general use of seed improved by selection from varieties of which the product is in demand or has a relatively high market value. The use of such seed increases the quantity of produce per acre; makes the quality better, and thus renders rural occupations more profitable and the people who follow them more prosperous and more contented. In growing crops two fundamental principles should be recognized: 1. The relative measure of success with which crops obtain their food from the soil and the air is determined by their environment—their opportunities. These apportunities depend primarily on the climate or weather as well as on the soil, and are modified largely by cultivation, particularly by a suitable rotation of crops, by manuring and by drainage. 2. The relative measure of success with which crops obtain their food from the soil and the air is determined by the power of each individual plant to take in, absorb and assimilate food from the soil and the air, the power of the plant to overcome obstacles and the ability of the plant to do things in its own environment. A plant is a living and working organism. Its capacity to live and assimilate is largely determined by the source whence it inherited its qualities.

In the summer of 1899 I put aside $100—my own money, not the public funds—to offer in prizes to Canadian boys and girls who would send me the largest heads from the most vigorous plants of wheat and oats from their father's farms, partly to learn whether the country could be got ready to accept the principle and adopt the practice, and partly to interest and educate the boys and girls. I had a wonderful response, and I paid the money in prizes with as much enjoyment as any money I ever spent. The letters I got from farmers and from their boys and girls were so suggestive and encouraging that in the following winter I went to my friend Sir William C. Macdonald, of Montreal, and said in substance: "Here is a great chance to do some educational work in progressive agriculture; to do something interesting, something attractive, something definite, something beneficial to the whole community, something easy and yet with plenty of difficulties. Farmers and their families may fail to appreciate the educational advantages of a plan or scheme set out in a written statement, but here is something which would be so helpful and instructive to boys and girls that they would go on with it, and the habits of observation and thought and study would go on with them." I told him $10,000 for prizes would set and keep this thing going for three years. He provided the money with all good-will—my little $100 came back a hundredfold—to offer as prizes to boys and girls to encourage them to carry out in practice the plan of selecting the largest heads of the most vigorous plants and growing seed from those heads on a plot by itself.

The yields from the crops of 1900 compared with those of 1903, on an average for all Canada for spring wheat, showed an increase of 18 per cent in the number of grains per hundred heads and 28 per cent of increase in the weight of grains per hundred heads. In oats the figures were 19 per cent of increase in the number of grains per hundred heads and 27 per cent of increase in the weight of grains per hundred heads. These are results from several hundred seed grain plats operated by boys and girls. Altogether over 1,500 entries were received. Out of that number 800 completed in full the first year's work, and 450 of them completed the three years' work in a satisfactory manner. The operations of the competitors were inspected from time to time during the term; the parents of the 450 competitors who completed the three years' work were found, as a rule, to be among the best farmers in the localities where they resided. Ninety-two per cent of the reports said on behalf of parents and guardians that the quarter-acre hand-selected seed plots carried crops decidedly more vigorous and heavy than the crops from the same varieties of grain grown on the same farm in

the same season from unselected seed. The plots and farms with these seed-grain plots were visited in many cases by an official of the department. It was learned from them, from the operators themselves, and from neighboring farmers, that the crops grown on these hand-selected seed plats were heavier and better, and that the plants in them were more vigorous than those produced on the other parts of the farm from the ordinary seed of the same variety without systematic selection. When results so notable as those can be gained by three years of intelligent labor, what do you think is possible in thirty years when this practice has become the common one through which to obtain seed for grain growing on the farms throughout Canada?

CANADIAN SEED GROWERS' ASSOCIATION.

Many of the farmers on whose farms the competition was carried on were formed into the Macdonald-Robertson Seed Growers' Association, out of which grew the Canadian Seed Growers' Association. Its third annual meeting was held in June, 1906, and the report of its proceedings contained a marvelous record of valuable public service. Particular information was obtained from leading members of the association. These reported several distinct and definite gains from the method of selection which had been followed by the members of the association, viz, the size and quality of the kernels definitely improved; the strains of selected seed maturing more evenly; the strains becoming better adapted to local conditions; varieties being kept pure; the strains becoming more resistant to disease and gaining in productiveness. All these are highly desirable and give added value to the crops in every case.

I made inquiries last year from the seed branch of the department of agriculture and from members of the Canadian Seed Growers' Association. I gathered from their estimates that one of the direct results from the seed-grain competition was an increase in the value of the grain crops of 1906 in Canada to the extent of at least $500,000. That is high finance for you. High finance by a man of lofty intelligence and spirit—5,000 per cent on an investment of $10,000, and the best of it all is that Sir William Macdonald has not sought and did not receive a single dollar of return for himself from it. That is laying up treasures where neither moth nor rust doth corrupt and which goes on gathering and diffusing benefits forever and forever for the people.

SCHOOL GARDENS.

Under the Macdonald rural schools fund arrangements were made for providing a school garden at each of five rural schools in each of five Provinces. A trained instructor was placed in charge of each group of five gardens and of the nature-study work at them. He spent one day at one school and the next at another. The cost of this was met by Sir William Macdonald. If the committee will permit me I would like to add to my evidence for its printed report some information as to what these school gardens are beginning to accomplish in various places for agriculture. I think the information would be valuable to the public, and I think you would be interested in learning something of the work which has been done in this way. Therefore, with your kind consent, when going over the transcript of my evidence, I shall insert a little more information.

At the school gardens an effort is being made to give the children information and training in three important matters in connection with agriculture, viz, the selection of seed, the rotation of crops, and the protection of crops against disease and insects. It is really industrial education. Children find out something by doing, observing, and recording the results themselves, and I say it over again that all worthy progress, in matters that are worthy of thinking about, springs from learning the lessons of consequences. As soon as a child understands that and governs his life

accordingly, he becomes a better pupil and the promise of a better citizen in every sense.

The school garden is one way of making rural life more popular as well as efficient. It may be the first step toward actuating the people to pay more to make the schools more efficient. The best education in rural schools should make the people like rural life and also enable them to make it more profitable. The best way to make any workman like his work is to make him understand it. The beginnings of all that and much more are laid in the schools.

With a view to emphasizing the purpose to make the school garden an integral feature of the school organization, Mr. Robertson quotes as follows from the testimony of a school inspector in Ontario:[a]

"Three leading motives underlie the origin and growth of school gardens in Europe: 1. To provide a convenient means of supplementing the teachers' income, thereby simplifying the problem of maintaining the public school. 2. To promote a practical knowledge of horticulture and agriculture, thereby increasing the national prosperity. 3. To furnish means and material for the practical study of botany as a desirable department of scientific knowledge.

"The vast majority of European school gardens look to utility. Of the few that recognize the importance of the educational end, nearly all stop short at the acquisition of a certain amount of scientific information and the habit of careful observation. On the other hand, the Macdonald school gardens, while designed to encourage the cultivation of the soil as an ideal life work, are intended to promote above all things else symmetrical education of the individual. They do not aim at education to the exclusion of utility, but they seek education through utility and utility through education. The garden is the means, the pupil is the end.

"The Macdonald school gardens not only have a recognized place in the provincial systems of education, but they are attached to the ordinary rural schools, owned by the school corporations and conducted under the authority of the school trustees and the express approval of the ratepayers.

"The work of the garden is recognized as a legitimate part of the school programme, and it is already interwoven with a considerable part of the other studies. The garden is becoming the outer class room of the school, and the plats are its blackboards. The garden is not an innovation, or an excrescence, or an addendum, or a diversion. It is a happy field of expression, an organic part of the school in which the boys and girls work among growing things and grow themselves in body and mind and spiritual outlook.

"The true relation of the garden to the school has been in good part established by the traveling instructors whom Professor Robertson appointed to supervise the work in each Province. These instructors were chosen as teachers of experience in rural schools, and were sent for special preparation, at the expense of the Macdonald fund, to Chicago, Cornell, Columbia, and Clark universities, and to the Ontario Agricultural College, Guelph.

"The chief tools and implements requisite to the school garden are hoes, rakes, hand weeders, garden lines, one or two spades and shovels, a wheelbarrow, hammer, saw, nails, etc. The pupils, as a rule, require only hoes, rakes, and hand weeders. Those pupils who are sufficiently mature to work a plot by themselves or along with a companion, can get along very well with hoes and rakes of the average size. In one case, where smaller tools were supplied, the pupils abandoned them after a little practice for those of the standard size.

"In the largest school two hours' work per week by the pupils was found requisite to keep the garden in proper condition. In one school the enthusiasm was so great

[a] Mr. R. H. Cowley, former inspector of schools in Ontario, appointed recently as superintendent of continuation classes for the Province of Ontario.

that the pupils did all their garden work outside the regular school hours. At this school, also, the garden did not suffer from neglect in the slightest degree during the midsummer vacation of six weeks. Experience indicates that when the gardens are fully organized the plots can be well kept by devoting two half hours per week to the work. This time is mentioned not as the ideal condition, but as an encouragement to those who may desire to start school gardens in districts where prejudices are likely to be met. The fact is that in the ordinary ungraded school, and for that matter in the urban school as well, the working power of the pupils is ill sustained throughout the day owing to their merely forced interest in much of the prescribed work. An awakening as to the educational waste of our schools is coming, and when the school garden is seen in its true relation it will have a period in each day of the school programme during the growing season. The children have ample time to spare, and the work of the gardens is promoting their intelligence and progress in the ordinary school course." * * *

CONSOLIDATED RURAL SCHOOLS.

Four object lesson consolidated rural schools were provided by the Macdonald rural schools fund—one in each of the four provinces of Ontario, New Brunswick, Nova Scotia, and Prince Edward Island.

They were located at places chosen or approved by the provincial departments of education. In each case a new building was erected to take the place of the small schools which at that time were serving the single sections proposed to be consolidated. They were each equipped with ordinary class rooms and an assembly hall, and also for manual training, household science, and nature study with a school garden.

A consolidated school board was elected according to the school law of the province concerned. It manages the school as a part of the school system of the province. The school in Nova Scotia was opened in September, 1903; in New Brunswick, September, 1904; in Ontario, November, 1904, and in Prince Edward Island early in the summer of 1905.

The Macdonald rural schools fund meets for a period of three years the additional expense of the consolidated school over the cost of the small rural schools which formerly served the locality. The school sections contributed exactly the amount of the former expenditure, and the extra cost is met by the Macdonald fund for three years to enable the people of four provinces to have those object lessons and experiments in education.

One teacher from each province was chosen in advance to become the principal of the consolidated school when established. They were formed into a class with the other teachers who were to be in charge of the groups of school gardens and sent on salary and at the expense of the Macdonald fund to receive special training at Chicago, Cornell, Columbia, and Clark universities in the United States, and also at the Ontario Agricultural College. Other excellent teachers were engaged by the consolidated school boards. One object of the consolidated being to fit nature study with school garden work, household science, and manual training into a course of study with the hitherto ordinary subjects in such a way as to give the best possible education for rural life, teachers with such special qualifications were employed. That increased the cost of maintenance. The remarkable and great increase in the daily average attendance of pupils also prevented any reduction in the number of teachers required, such as has been the case in the United States. There, consolidation of schools has been effected to a considerable extent in some seventeen different States, but without the improvement and enlargement of the courses by school gardens, household science, and manual training.

The following table shows some of the statistical results from the first years of the consolidation under what I term the "old" and the "new:"

Name of consolidated school.	Sections included.	Teachers employed.		Total of salary per annum.		Children enrolled.		Average daily attendance.		Conveyance.	
		Old.	New.	Old.	New.	Old.	New.	Old.	New.	No. of vans.	Average cost per van per school day.
Middleton, Nova Scotia	8	10	11	$3,495	$5,729	361	409	198	284	11	$2.08
Guelph, Ontario	5	6	7	2,200	4,450	174	258	116	171	8	2.60
Kingston, New Brunswick	7	7	5	1,700	2,950	125	163	55	134	7	2.15
Hillsboro, Prince Edward Island	6	6	6	1,190	3,300	148	161	89	119	6	1.67
Total	26	29	29	8,585	16,429	808	991	458	708	32	.....

The increased cost of the consolidated schools over the single rural schools is caused largely by the better salaries paid to the teachers. The 29 teachers in the section schools received on the average $296 per annum; the 29 teachers in the consolidated schools received on the average $566 per annum. It will not be necessary to pay so much for the teaching staff in the consolidated schools when the normal schools turn out teachers qualified to conduct school gardens, some household science work, and manual training as well as the ordinary book subjects. The cost of conveyance of the children is a large item of expense. At Middleton, Nova Scotia, the average cost per van per school day was $2.36 in 1903–4, $2.03 in 1904–5, and $1.84 in 1905–6. When the school boards undertake to meet the whole expense themselves, still more economical methods of management will prevail. The larger children will walk to meet the vans at convenient points, and in some cases parents themselves will arrange for the conveyance of their children.

The educational results from these schools have been entirely satisfactory to the authorities, to the teachers, and especially to the parents and children. The average daily attendance at the consolidated schools was on the whole over 55 per cent higher than the average daily attendance at all of the schools which formerly served the localities; at Kingston, New Brunswick, it was over 140 per cent higher.

The attractiveness of the consolidated schools becomes in itself a form of compulsory education, the interest of the children being the power which secures regular attendance. A great point has been gained when love of the school and love of the education there set the pace for progress.

One of the gratifying results is the large number of boys and girls, young men and young women, from rural homes, who are doing advanced or high school work. At one of these schools there were about 100 pupils in the high school grades. Many of these are preparing to be teachers in rural schools. When teachers who themselves have been educated in consolidated rural schools, with nature study, household science, and manual training, teach in single rural schools they will make the influence of their own training tell throughout many of the one-room schools.

At Middleton, Nova Scotia, after the three-year period was up, in August, 1906, the people themselves undertook to maintain the consolidated school with all the departments. Some of the routes on which the children were conveyed in vans had been 6 miles long. The area for the consolidated school was reduced, the more distant sections reopening their small schools. Some of the larger children from them find their own way to the consolidated school. The conveyance of the children in vans was a heavy item of expense. It had been over $15 per annum per pupil in average attendance. That has been greatly reduced. The cost of conveyance is becoming less at all of the consolidated schools every year. As the ratepayers gain

experience and become responsible for the expenditure (with perhaps grants of specific sums from provincial governments) the cost will likely be much further reduced. Sir William Macdonald contributes to the Middleton school $1,200 per annum for a further period of three years. The consolidated schools provide so much better opportunities for education that, while the cost is more, it is not apparent that the money they do cost could be spent in any other way with so much direct and lasting benefit to the people. And the people of Canada can well afford to spend as much as they desire to spend on their schools.

Notable results have followed in several of the provinces from these object lessons—consolidated rural schools. Doctor MacKay, superintendent of education in the Province of Nova Scotia, writes that in his province 53 schools have been consolidated into 22 effective ones. In the Province of New Brunswick there are four large consolidated schools, each with nature study and school garden, manual training and household science. The provincial government pays half the cost of conveying the children and gives other special grants.

THE MACDONALD INSTITUTE AT GUELPH.

Sir William Macdonald gave the sum of $182,500 to provide buildings and equipment at the Ontario Agricultural College, Guelph, to train teachers now in the service for this "new education." Besides serving that purpose the institute has become a headquarters for manual training, for household science, and for providing short courses of instruction and training for farmers' daughters and others in cooking, sewing, domestic art, and other branches of domestic economy. Two buildings were erected. Short courses of instruction in nature study and school gardens were provided without fees to teachers. The governments of four eastern provinces where the consolidated schools were established gave scholarships to enable teachers to attend. Over 200 teachers have already taken these courses. When pupils who pass through consolidated rural schools go on through the normal schools, each with advanced work and suitable professional courses in manual training, nature study, and household science, they will be thoroughly qualified to carry on this better system of education. * * *

MACDONALD COLLEGE.

Macdonald College has grown out of these attempts and accomplishments, these trials and experiments and evidences of progress, as well as out of Sir William Macdonald's keen desire to help the rural population to build up the country and to make the most of it and themselves. In some measure it grew out of the school garden movement and the consolidated schools to serve as a headquarters for the training of leaders. In some measure it grew out of the manual training movement, which is a first necessity in the general education of pupils if they are to profit by technical and industrial education afterwards. In some measure it grew out of the oft-expressed desire on the part of the educational leaders over the whole Dominion for such advancement and improvement of education for rural communities as would not only prepare the children for life at its best in rural occupations, but would also satisfy the people as being the right training for their children. In consequence it was founded, erected, and equipped for the following among other purposes:

1. For the advancement of education; for the carrying on of research work and investigation and the dissemination of knowledge, all with particular regard to the interest and needs of the population in rural districts.

2. To provide suitable and effective training for teachers, and especially for those whose work will directly affect the education in schools in rural districts.

The college occupies a beautiful site overlooking the Ottawa River at Ste. Anne de Bellevue, 20 miles west of Montreal. The main lines of the Grand Trunk and

the Canadian Pacific railways pass through the property, and the stations of both railways are within its boundaries.

The college property comprises 561 acres, and has been arranged into three main areas, viz: First, the campus, with plots for illustration and research in grains, grasses, and flowers, containing 74 acres; second, the small-cultures farm of 100 acres for horticulture and poultry keeping; and, third, the live-stock and grain farm, extending to 387 acres.

THE BUILDINGS ON THE CAMPUS.

(*a*) The main building provides administration offices, class rooms, and workrooms for the school for teachers, nature study, household science, and manual training, library and reading room, museum, and assembly hall. (*b*) Two laboratory buildings furnish accommodation and equipment for the departments of physics, chemistry, biology, and bacteriology. Both are connected with the main building by covered corridors. (*c*) The agricultural, horticultural, and live-stock building contains classrooms, workrooms, a live-stock arena, farm-machinery hall, dairy workrooms, cold storage, and adjacent greenhouses for horticulture. (*d*) The poultry building has class rooms, judging room, incubator rooms, brooder house, and pens for different breeds of poultry. Colony houses for poultry are located on adjoining grounds. (*e*) The women's residence building contains reception rooms and bedrooms for over 200 students, a dining hall to seat 350, a gymnasium, a swimming pool, and all other modern accessories. It is connected with the main building by a covered corridor. (*f*) The men's residence building has accommodation for over 150 students, a gymnasium, a swimming pool, and other modern appointments.

These buildings are of fireproof construction in stone, brick, steel, and concrete. The roofs of the six main buildings are also of steel and reenforced concrete, and all of the roofs are covered with red tiles.

Every building is provided with a complete system of ventilation whereby fresh air (warmed in winter) is furnished to every room, including bedrooms. A duct from each room removes the foul air and thus insures a continuous circulation of pure air.

Every room has a reinforced concrete floor; even if the furniture of one room should get on fire the fire could not spread beyond the room itself. There is nothing in the walls or in the ceilings of the rooms to catch or spread fire. In fact, there is not a wooden joist, a wooden stud, or a wooden rafter in any of the main college buildings. The buildings are put up in such a way as to cost the lowest possible sum annually for maintenance. One desires to speak of their massive and enduring qualities with the modesty which the founder would appreciate. Nothing has been done for display, but the one and a half million dollars invested in the land, the main buildings, and their equipment are a gift for the benefit of the rural population of half a continent, with a particular desire to serve the people of the Province of Quebec. Besides donating the whole property without incumbrance, Sir William placed a sum of over $2,000,000 in the hands of the trustees of McGill University as an endowment for the maintenance of the work of the Macdonald College.

The buildings are heated, lighted, and supplied with water from the power house. A system of tunnels provides for the distribution of heat, light, power, water, and gas. The power house contains six horizontal tubular boilers of 150 horsepower each, with engines, electric generators, pumps, and a gas plant. The water supply is taken from the channel of the Ottawa River and will be filtered.

THE SMALL-CULTURES FARM.

On the small cultures farm is a commodious brick barn for the storage of garden and orchard produce, the grain grown on the experimental plats, the implements of cultivation, the machinery for thrashing and cleaning seed, and for the stabling of horses.

There are several acres of apple orchards in full bearing. The greater part of 100 acres will also be used for commercial work, demonstration and investigation with large fruits, small fruits, and vegetables. Macadam and other roads have been laid out and built to give ready access to the various sections.

An area of several acres is set apart for poultry runs, where 1,000 hens will be kept in simple colony houses, each built to accommodate from 25 to 75 fowls.

THE MAIN FARM.

The live stock and grain farm, comprising about 387 acres, is in good state of cultivation and provided with well-built roads. The farm buildings consist of a farmhouse, a number of cottages, barns with commodious stables for horses and different breeds of cattle, and a piggery for different breeds of swine. The cattle stables have room for over 80 milch cows and 100 young animals.

As an instance of the use to which the small-cultures farm and the main farm will be put, I may mention that we expect to distribute at low rates specially well-bred and selected live stock in cattle, swine, and poultry, particularly to agricultural societies and farmers' clubs, throughout the Province of Quebec. We propose to take up from time to time some definite research and illustration work, as, for instance, the improvement of the potato crop, in a manner similar to what we have attempted in the case of improving the poultry for the farmers and the markets. By the spring of 1908 we shall be ready to receive a number of apprentice students who will assist in carrying on the work on the small-cultures farm and on the main farm. When bright young men come to us from the farms of Quebec and other parts of Canada, we shall give them an opportunity of learning the best way of doing things under competent instruction. Diligent, earnest, and trustworthy young men can earn enough on the college farms in summer to pay their board while attending the college class rooms during the winter. A student apprentice in six months may earn his board and a first-class, second-class, or third-class credit. A first-class credit will entitle the student apprentice to free board and room, as well as free tuition in the college during the following six months. During these six months he would be expected to devote probably two hours a day to the continuation of his apprentice work in some of the departments, such as horticulture, poultry, live stock, or farm machinery. A second-class credit would give him three months' free board and tuition, and a third-class credit nothing more than board, room, and working instruction during the summer. There will also be some openings for young women as student apprentices.

DEPARTMENTS OF THE COLLEGE.

Students will be enrolled for courses of instruction in one or more of the three departments or schools of the college, viz:

1. *The School for Teachers*, which provides practical and thorough training for teachers in the art and science of teaching.
2. *The School of Agriculture*, which aims to provide a thorough theoretical and practical training in the several branches of agriculture; and
3. *The School of Household Science*, in which young women receive training in those branches of household economy that make for good home making.

THE GOVERNMENT OF THE COLLEGE.

Macdonald College is incorporated with McGill University. Under the statutes, the governors of the university constitute the principal of Macdonald College, together with such other members of the staff of Macdonald College and such other persons as the governors may see fit to appoint from their own number or otherwise, as the Mac-

donald College committee. It is the duty of this committee to direct the educational policy and curriculum, to frame and enforce the necessary regulations touching the details of the course of study and teaching, the college examinations, the admission of students, the amount and mode of payment of fees, and the discipline and internal government.

There is also appointed by the governors an executive committee of the Macdonald College committee, whose duties are such as the governors may from time to time determine or as the Macdonald College committee may intrust to it.

All courses given in Macdonald College leading to a degree in the university, the examinations held in connection therewith and fees payable in respect of such courses and examinations are subject to the approval and under the control of the corporation of McGill University.

Courses of study for the training of teachers for the Protestant schools of the Province of Quebec, together with the examinations held in connection therewith, are under the direction of the teachers' training committee.

The professors so far appointed are Canadians in full sympathy with the aspirations and ideals of our people and with a knowledge of their needs. We hope for such a mutual bond of sympathy and confidence between the staff, the pupils, and the public as will enable the college to render the largest and best possible service to its constituents. In the widest sense its field is the world.

THE SCHOOL FOR TEACHERS.

By an agreement with the government of the Province of Quebec, confirmed by an act of the legislature, it was provided that a school for the training of teachers for the schools under the control of the Protestant committee of the council of public instruction should be established and carried on at Ste. Anne de Bellevue in lieu of the McGill Normal School in Montreal. In this department the college will give a thorough training to teachers by instruction and training in the school for teachers itself, and by practice in the model schools. The arrangements will afford excellent facilities to student teachers from all parts of the Province. The session of this school will begin September 17, 1907, and close on the 17th of June, 1908.

Besides the training of teachers for all the schools under the Protestant committee in the Province of Quebec, the college will receive other teachers for training and will also provide courses for teachers in (*a*) nature study work with school gardens, (*b*) household science, and (*c*) manual training. These teachers may come from any part of Canada and from elsewhere, "all with particular regard to the interests and needs of the population in rural districts."

THE SCHOOL OF AGRICULTURE.

First term begins October 1, 1907, and ends December 21, 1907. Second term begins January 3, 1908, and ends April 30, 1908.

Courses are offered in the School of Agriculture as follows:

A. Short courses of from two weeks to three months each.

B. A two-year course leading to a diploma.

C. A four-year course leading to the degree of B. S. in agriculture.

A. Short courses are provided and made as practical as possible in—

1. Live stock.
2. Seeds, crops, and weeds.
3. Poultry.
4. Horticulture.

B. The two-year course embraces studies in—

1. Field and cereal husbandry.
2. Animal husbandry.
3. Poultry husbandry.
4. Horticulture.

(Studies duly coordinated are carried on in the chemistry, physics, biology, and bacteriology laboratories, bringing out the direct bearing of the sciences on agriculture. Adequate attention will also be given to English, mathematics, and bookkeeping.)

C. The four-year course: This is a continuation of the two-year course for the purpose of affording opportunity for more advanced knowledge of rural economy and more thorough and exact acquaintance with the natural sciences and their applications to the conditions, processes, and organizations of rural life.

A student may proceed with the work of the third year toward a degree:

(*a*) If on entering his first year he presents a matriculation certificate, or an equivalent, and completes a satisfactory examination on the work of the two-year course; or

(*b*) If he obtains 60 per cent in general proficiency in the examinations on the work of the two-year course, and also has the permission of the faculty.

Third year.

English (composition and literature), French, economics, agronomy, live stock, dairying, horticulture, chemistry, physics, biology, bacteriology.

Fourth year.

English, French, physics, chemistry, biology, bacteriology, and one of the following optional courses: Animal husbandry course, agronomy course, horticultural course, dairy husbandry course.

THE SCHOOL OF HOUSEHOLD SCIENCE.

First term begins September 24, 1907, and ends December 21, 1907. Second term begins January 3, 1908, and ends April 3, 1908. Third term begins April 7, 1908, and ends June 26, 1908.

The school of household science occupies, along with the school of education, all of the second and third floors of the main building. It contains three large kitchens, a practice dining room, a sewing room, a class laundry, millinery and dress-making rooms, a house-decorating room, a practice apartment house, several storerooms, and offices, all thoroughly equipped for instruction in the science and art of housekeeping.

Courses are offered in domestic subjects, as follows:

A. Short courses.

B. A one-year house-maker course.

C. A two-year course leading to a diploma.

A. The short courses last three months each, are made as practical as possible, and include the study of:—

1. Foods.
2. Plain cooking.
3. Sewing.
4. Laundry.
5. Home nursing, sanitation, and hygiene.
6. Home art.
7. Care of the house.

B. The one-year home-maker course embraces practical and theoretical work in:—

1. Foods.
2. Cookery.
3. Household economics.
4. Materials for clothing.
5. Dressmaking and millinery.
6. Laundry.
7. Fuels, ventilation, and house sanitation.
8. Home nursing and hygiene.
9. Home art.

(Simultaneous studies are carried on in the physics, chemistry, biology, and bacteriology laboratories to show the direct bearing of the sciences on the practical side of housekeeping.)

C. The two-year course is an extension of the one-year course, comprising a more intensive study of the subjects therein embraced; and also more advanced laboratory work in the chemistry, physics, biology, and bacteriology departments. English, mathematics, and history are also obligatory subjects in this course, and the student is allowed to choose two of the following: Home dairying, poultry, horticulture, seeds and plant improvement, and wood carving.

TERMS OF ADMISSION.

All candidates for admission to the Schools of Agriculture and Household Science—

1. Must be 17 years of age.
2. Must produce satisfactory evidence as to moral character and physical health; and
3. In case of candidates for the courses in agriculture must produce evidence of having worked for a season on a farm in Canada, affording a practical knowledge of ordinary farm operations.

No entrance examination test will be required for the short-course students, but all candidates for the one and two year courses will be required to pass an examination in—

Reading, writing, and dictation.
English grammar.
Elements of arithmetic.
Outlines of general geography and the geography of Canada.

TUITION FEES AND LIVING EXPENSES.

Tuition will be free to residents of the Province of Quebec, and, to the extent to which there is room, practically free to other Canadians.

There will be a small laboratory fee (not exceeding $5) to cover the actual cost of materials used and a contingency fee to cover possible breakages, penalties, etc.

Students in residence.—The young women in residence will be in charge of a house mother. A dietician and housekeeper will supervise the dining room and the work of the servants. A matron will be in charge of the men's residence.

Board and room will be furnished for $3.25 per week each, where two students occupy one room, and in case of students occupying single rooms $3.50 per week.

Further details as to the courses, etc., will be found in the announcement of the Macdonald College, which will be sent on application.

In brief, Macdonald College stands for the advancement of education, for the carrying on of research work and investigation and the dissemination of knowledge, all with particular regard to the interests and needs of the population in rural districts. Its motto is "Mastery for Service."

MOVEMENTS FOR THE IMPROVEMENT OF RURAL EDUCATION.

The following particulars relating to movements for the improvement of rural education are derived from the latest official reports of the several provinces:

Ontario.—In view of the increased appropriation for rural schools in Ontario, as already explained, the education department has issued special instructions determining the minimum equipment which a school must possess in order to share the legislative and county grant. The instructions also include suggestions as to additional equipment which will enable local school boards to provide adequately for the work of continuation classes, manual training, and school gardens.

Special arrangements have also been made by which traveling libraries may be lent to small public libraries, thereby greatly increasing the amount of reading matter brought within the reach of country districts.

Quebec.—In his report for 1905–6 the superintendent of public instruction says:

> Mr. C. E. Dallaire, lecturer on agriculture, is still employed in giving, with his usual zeal and competency, instruction on what I may call "School gardens."
>
> These gardens are increasing, and the pupils who have charge of them welcome with pleasure the practical lessons on horticulture which are given. There is great rivalry among the pupils, and, as Mr. Dallaire remarks in his report, a love of school and study has been singularly increased.
>
> This instruction in agriculture, however little it may be developed, supplies the children nevertheless with lessons in things which, arousing their intellect, makes them understand the importance attached to the career of a farmer and gives them a greater love for agriculture.
>
> The number of pupils taking part in these horticultural occupations has increased from 152 in 1905 to 425 for last year.

The superintendent notes also the increasing interest in the condition of rural schools, and advocates consolidation wherever practicable. While it is the policy of the government to grant special aid to poor districts, the superintendent expresses the opinion that local taxes for the support of the rural schools could be easily increased. "There are," he says, "many rural municipalities which are quite able to have ideal schools without reliance upon government aid or other outside assistance."

Nova Scotia.—The cost of conveyance is a somewhat serious obstacle to consolidation of rural schools in this province. Three small financial inducements are offered to sections in which consolidation is desirable, namely, a special legislative grant for equipment, an annual grant from municipal funds, and a provincial grant, presumably from the money saved by the reduction in the number of teachers. As a result of these inducements 53 schools have been already consolidated into 22.

As regards the Macdonald consolidated school the superintendent states that—

> Four out of the eight school sections consolidated for three years at the expense of Sir William C. Macdonald have taken advantage of their liberty to set up again their little rural schoolhouse. Three are to provide for the cost of transportation of their children into Middleton, to the Macdonald consolidated school.

The school-garden work in the five schools aided by the Macdonald fund has been taken over by the respective school boards.

New Brunswick.—In 1905–6 there were three consolidated schools in successful operation in this province, and a fourth was to be opened in the autumn session. The Macdonald consolidated school at Kingston was drawing near the close of the third year—that is, the close of the period during which aid was promised from the Macdonald fund. The experiment has fulfilled all the expectations of its promoters, and the hope was indulged that the people themselves would be willing to provide for its continuance.

SECONDARY SCHOOLS AND HIGHER INSTITUTIONS.

The principal cities of Canada are well supplied with private secondary schools. Higher education is given in colleges which prepare candidates for admission to the universities, which are the degree-conferring institutions in the several provinces.

The following table pertains to the universities:

Universities of Canada.

Name.	Date of foundation.	Endowment.	Value of property owned.	Income.	Approximate number of students.
University of King's College, Windsor, Nova Scotia	1790	$140,000	$250,000	$8,500	25
University of New Brunswick, Fredericton, New Brunswick	1800	[a] 8,964	.....	.....	134
McGill University, Montreal, Quebec	1821	2,074,504	1,874,937	346,448	1,220
Dalhousie College and University, Halifax, Nova Scotia	1818	420,000	100,000	2,800	369
University of Toronto and University College	1827	3,700,000	2,922,250	200,000	2,547
University of Acadia College, Wolfville, Nova Scotia	1838	241,970	130,000	18,528	115
University of Queen's College, Kingston, Ontario	1841	500,000	200,000	54,000	875
University of Bishop's College, Lennoxville, Quebec	1843	192,918	154,200	16,388	51
University of Ottawa, Ottawa, Ontario	1848	.....	300,000	50,000	500
University of Trinity College, Toronto [b]	1852	490,000	380,000	31,500	[c] 114
Laval University, Quebec and Montreal [d]	1852	None.	180,000	None.	1,390
University of Mount Allison College, New Brunswick	1862	120,000	150,000	15,000	125
University of Manitoba, Winnipeg	1877	[e] 150,000	70,000	.....	368
Victoria University, Toronto, Ontario	1836	487,455	464,740	44,013	[c] 483
McMaster University, Toronto, Ontario	1887	900,000	250,000	75,000	200
University of St. Joseph's College, St. Joseph, New Brunswick	1864	.....	80,000	25,000	200

[a] Government grant.
[b] Federated with University of Toronto.
[c] Included in total of University of Toronto.
[d] Quebec Seminary, an ecclesiastical organization, defrays all expenses.
[e] Acres of land.

The most important recent event in the history of higher education in Ontario is the federation of the University of Toronto, which was proclaimed by the lieutenant-governor, November 18, 1903, and came into effect November 1, 1904. The university comprises a faculty of arts, faculty of medicine, faculty of law, and a faculty of applied science and engineering. Among the affiliated institutions are the University College, Victoria College, Trinity College, the Toronto School of Practical Science, the Toronto College of Music, and the Agricultural College of Ontario.

In addition to the customary degrees in arts, in medicine, and in law, the university offers in applied science the degree of bachelor of applied science, and the degrees of civil engineer, of mining engineer, of mechanical engineer, and of electrical engineer, also the degree of bachelor of the science of agriculture. Graduates in the course of pedagogy who hold a degree in arts or a first-class diploma from the education department are admitted to the examination for the degree of bachelor of pedagogy. Candidates for the degree of doctor of pedagogy must have obtained the former degree, or have had seven years' successful experience as teacher or school inspector in Ontario. The university also offers a two-year course leading to the diploma in commerce, and one of four years leading to the degree of bachelor of household science. By the liberality of a private donor, the university has been recently provided with a special building for home economics.

AGRICULTURAL COLLEGES.

In addition to the agricultural college at Guelph, Ontario, now affiliated to the University of Toronto, there is a provincial school of agriculture at Truro, Nova Scotia, and two schools of agriculture in Quebec—one at L'Assomption, the other at Ste. Anne de la Pocatière. Macdonald College, which has already been fully described, also comprises a school of agriculture.

The University of Toronto announces the creation of a faculty of forestry with a four-year course of instruction, to which students will be admitted for the session of 1907–8.

CHAPTER VIII.

EDUCATION IN MEXICO, URUGUAY, AND PANAMA.

MEXICO.

Numbers I and II of Volume VII of the Boletin issued by the secretary of public instruction of Mexico (on June 20 and July 20, 1907), consist of two volumes containing together 874 pages. They present a view of the condition of education in Mexico at the present time, including discussions in the legislature, decrees affecting education, programmes, statistics, reports of special institutions (of agriculture, music, commerce, and engineering), and contain, besides, articles upon educational, philosophical, philological, literary, and scientific subjects, under the head of university miscellanies, and conclude with notices of important events in the educational and intellectual world at large.

The first number opens with the message of the President of the Republic to the Twenty-third Congress, April 1, 1907, in which he briefly reviews the educational situation in Mexico as follows:

There were 557 primary schools supported by the State in the Federal district and territories in 1906, with 2,371 teachers, an attendance of 59,351 pupils, and an expenditure of 2,250,000 pesos ($1,120,500), or 37.93 pesos ($18.88) per pupil. Of these schools 377 were in the Federal district, where 17 new schools were established in the early part of 1907, 3 of which were of the grade of superior primary instruction, the remaining 14 belonging to the elementary grade. There were, besides, 219 private schools in the district, with 13,145 pupils—7,001 boys and 6,144 girls—and 996 teachers. A department of hygiene was created by the director-general of primary instruction in June, 1906, for the purpose of providing for the proper physical development of the pupils in suitable hygienic surroundings, and of preventing the spread of contagious diseases. Two thousand three hundred and seventy-four pupils had received a medical examination under this department. The sum of 100,000 pesos ($50,000) was expended for school equipment during the year.

The following summary of the statistics of primary instruction is taken from the annual report of the secretary of division of that branch of instruction.

National primary schools (i. e., those supported by the Government) in the Federal district, 1906.

	No. of schools.	Enrollment.
Infant schools	4	684
Elementary primary (boys 120, girls 128, mixed 51)	299	38,376
Superior primary (boys 14, girls 16)	30	2,206
Supplementary night schools for laborers (men 18, women 4)	22	3,692
Complementary night schools for laborers (men 5, women 5)	10	448
Commercial schools (men 1, women 1)	2	228
Total	367	45,634

Of the enrollment 23,468 were boys and 22,166 were girls. There was an increase of 6,183 pupils over the preceding year, showing, the report adds, the successful operation of the compulsory law, through the efficiency of the truant officers in warning remiss parents and the disposition of the authorities to inflict penalties.

The average attendance was 36,336, or 80 per cent of the enrollment.

Teaching force of national primary schools.

	No. of teachers.
Infant schools	24
Elementary primary	1,179
Superior primary	373
Supplementary	122
Commercial	37
Complementary	58
Total	1,793

Of the teaching force, 563 were men and 1,220 women, or more than double the number of men.

Besides the above State-supported schools it appears that there were 10 additional schools which, although they are maintained by the Federal Government, are not administered by the secretary of primary instruction. They are called annexes to the normal schools, and were attended by 2,600 students in 1906, of whom 1,431 were young men and 1,169 young women. The teachers numbered 191.

Private primary schools in the Federal district in 1906.

For boys	73
For girls	49
Mixed	97
Total	219
Enrollment:	
Boys	7,001
Girls	6,144
	13,145
Teachers	996

From the foregoing we get the following figures: Public and private schools in the Federal district, 586; teachers, 2,980; enrollment, 61,400, which is 11.33 per cent of the population of the district.

Primary schools in the territories.

NATIONAL SCHOOLS.

Tepic	113
Lower California	54
Quintana Roo (in Yucatan)	13
Total	180

Enrollment, 11,060; teachers, 387.

PRIVATE SCHOOLS.

Schools	61
Enrollment	3,045
Teachers	101

The total of national or State supported schools in the territories and Federal district was, therefore, 557, with 59,351 pupils and 2,371 teachers.

The national and private primary schools together in the Federal district and territories amounted to 837, with 3,458 teachers and 75,865 pupils.

The author adds to the above the number of primary schools of the various Mexican States, and reaches the following summary for the whole country: Whole number of primary schools in the Republic, 11,519; number of teachers, 19,131; pupils, 738,813, or 5.42 per cent of the population of the Republic. The percentage in the Federal district, as was remarked above, amounted to 11.33, as against 9.86 in 1905 and 8.31 in 1904.

The secretary compares the percentage for the whole country with the figures for the Central American States, which he gives as follows: Costa Rica 7, Honduras 6, Nicaragua 5, Salvador 4, and Guatemala 3, while he adduces the corresponding percentages for other countries as follows: England 16, Germany 15, Austria-Hungary 15, France 14, Belgium 11, Italy 10, Spain 8, the United States 18, and Japan 8.

The superior council of education discussed at great length the means of converting the primary schools into agencies of an anti-alcohol propaganda.

The President, in alluding to the work of the schools of medicine, of jurisprudence, of commerce and administration of arts and trades, the national preparatory school (an institution with "modern" or scientific studies which has replaced the celebrated Jesuit College of San Ildefonso, founded about 1750), and the normal schools, mentions especially, as of public importance, the following points: The study of typhoid fever has been prosecuted in the pathological and bacteriological institute with the result that the bacillus of that fever

has been identified and preventive serums prepared. The attendance at the superior school of commerce and administration and of arts and trades for women has increased to such an extent that additional teachers and increased accommodations were found necessary, a fact which shows that the modernizing or practical tendency in education is increasing in Mexico.

One feature of Mexican education, which illustrates the tenacity of the older European or Latin cultivation, is the prominence given to music and the drama in public instruction. The work of the national conservatory of music, which is supported by the Government, is commended by the President, and he states that in the competition of the students in dramatic composition, organized under the secretary of public instruction and fine arts, there were 53 competitors, to three of whom prizes were awarded by the jury.

The superior council of education discussed at length the plan to establish a secondary school for girls with provision for students to reside in the school under the supervision of directors and teachers. The course of studies submitted for discussion is designed to carry out the object of the instruction, viz, to prepare young women both mentally and physically for their duties at home and in society. What appear to be alternative courses were proposed, one rather limited in scope, while the other was broader. The former included Spanish, geography, history, drawing and painting, elementary science, duties of women in the home and in society, sewing and making garments, and physical exercises, while the other added French, mathematics, experimental physics and chemistry, natural history, cosmography, national history, logic, and morals. The criticism of the programmes which arose in the course of discussion, was that the former tended to turn out merely good housewives, while the latter would rather produce "bluestockings," a term which is quoted from the French—"bas-bleus."

THE NATIONAL SCHOOL OF ENGINEERING.

The number of students in this institution in February was 183, with 7 in the practice school at Pachuca. The course of study comprises higher mathematics, topography and hydrography, descriptive geometry, mechanics, structural iron work, stereotomy and carpentry, mathematical physics, hydraulics, with applications, methods of construction, strength of materials, stability, land communication, water communication and hydraulic constructions, analytical chemistry and assaying, mineralogy, geology and paleontology, mining and metallurgy, political economy and law, and topographical, architectural, and machine drawing with designing.

Field work followed the examinations, which were completed in November. Topographical surveys were made and maps constructed

from them. Geological parties studied different volcanic areas (including the ascent of the volcano of Colima), besides making a geological reconnoissance of a large extent of territory.

Practical studies in electrical engineering and in mechanics included visits to various electrical installations in the Capital and its neighborhood, enabling the students to examine and note the operation of dynamos, motors, accumulators, etc., together with the general equipment of the plants and of other machine shops, including those of the railways and various factories. The students were required to solve problems upon the installation and operation of machines.

Graduate students of this school of the previous year have been engaged in practical civil engineering on the isthmian railroad (of Tehuantepec) and at the harbors of Salina Cruz and Coatzacoalcos. They are required to prepare reports on their work. Students of mining and metallurgy visited metallurgical works at various mining centers. Graduates in mining engineering, like those in civil engineering, are required by law to devote themselves for a specified time after graduation to practical work at the mines in order to undergo a professional examination. The students in metallurgical and mining engineering at Pachuca likewise visited the various mining centers as required by law.

SCHOOL OF AGRICULTURE.

This school had 71 students in 1906. The course of study includes physics and meteorology, agricultural chemistry and mechanics, mathematics, topographical drawing, topography, agriculture, agricultural technology, zoology, and botany, drawing of machines, economics and administration, rural constructions, zootechnics and hygiene, anatomy and histology, general pathology, theoretical and practical farming, physiology, pathological anatomy, materia medica and therapeutics, microbiology, obstetrics, and forensic and operative medicine.

SUPERIOR SCHOOL OF COMMERCE AND ADMINISTRATION.

The following are the studies prescribed for the Superior School of Commerce and Administration:

COURSE FOR ACCOUNTANTS.

FIRST YEAR.

English, algebra, Spanish, commercial arithmetic, general economic geography.

SECOND YEAR.

Instruction in values of merchandise, advanced arithmetic, documentation and commercial correspondence, French, lectures on the history of commerce, financial operations, banking and stocks, English, German, bookkeeping.

THIRD YEAR.

Bookkeeping, political economy, constitutional law, French, advanced banking, stocks and financial operations, mercantile law, German, English, lectures on Mexican history, practical exercises in preparing documents relating to mercantile law.

COURSE FOR CANDIDATES FOR CONSULSHIPS.

FIRST YEAR.

Fiscal legislation relating to customs, taxes, direct contributions, French, political economy, constitutional law, Spanish, German, English.

SECOND YEAR.

Fiscal accounts, values of merchandise, French, German, English, commercial law, statistics, consular guide, practice in fiscal accounts and special bookkeeping of the various public offices, and preparation of papers on commercial law.

COURSE FOR EXPERT EMPLOYEES OF PUBLIC ADMINISTRATION.

FIRST YEAR.

Commercial arithmetic, general economic geography, chemistry applied to commerce, Spanish, English.

SECOND YEAR.

Values of merchandise, French, German, English, history of commerce, bookkeeping, statistics and history of Mexico.

THIRD YEAR.

Fiscal legislation, customs, taxes, etc., fiscal accounts, political economy, constitutional and commercial law, French, German, English, preparing papers in commercial law, and accounts.

UNPRESCRIBED (LIBRES) STUDIES.

Commercial calligraphy, bookkeeping, commercial arithmetic, short hand and typewriting, English, French, and German.

THE NATIONAL SCHOOL OF FINE ARTS.

ARCHITECTURE.

FIRST YEAR.

Instruction in modeling and decoration, aquarelles, architectonic drawing, with practical work (architectural laboratory), drawing from casts, synthetic reviews of elementary mathematics.

SECOND YEAR.

Styles of ornamentation of building, descriptive geometry and stereotomy, theory of architecture and analytical drawing of the elements of buildings, architectural laboratory, drawing from casts, materials and articles of construction.

THIRD YEAR.

Theory of shadows and perspective drawing, analytical study of construction, comparative architecture, architectural work shop, ornamental flora and composition of decoration, drawing of drapery.

FOURTH YEAR.

First year history of art, elements of general mechanics and graphics, statics, elements of topography, legal and hygienic requirements in building, first-year composition, architectural workshop, drawing from the nude and draped figures.

FIFTH YEAR.

Architectural workshop, accounts and administration of works, second-year composition, estimates and appraisements, resistance and stability of constructions, second-year history of art.

ART DEPARTMENT.

History of art, anatomy for artistic purposes, perspective drawing (copying) and drawing of the figure from casts, landscape drawing, drawing from the nude and draped figures, painting (clare-obscure and in colors), sculpture.

There were 946 students inscribed at the National Conservatory of Music in 1906, with a mean daily attendance of 560. Of the total inscription 490 were young women and 456 young men, and of the attendance 340 were young women and 220 young men.

The National School of Arts and Trades is established for the benefit of those who intend to be carpenters, iron workers, turners, stonecutters, founders, electricians, and mechanicians, and has a three-years' course. For all but the last two specialties the course includes, for the first year, arithmetic and geometry, lineal drawing, Spanish (reading of authors), knowledge of materials, ironwork, values, workshop practice, history of decorative art, and styles of ornamentation. The subjects for the second year include practical exercises in descriptive drawing and perspective, lectures on physics, drawing, Spanish reading and copying, select compositions, French, knowledge of materials and tools, and values, with workshop practice. Third year, lectures on chemistry, drawing, illustrated lectures on Mexican geography and history, morals and hygiene, making estimates, knowledge of materials, workshop practice, history of decorative art, and styles of ornamentation. The courses for electricians and mechanicians, divided into four years each, are substantially the same as the foregoing, with theoretical and practical electricity, mechanics, and machinery as special subjects. The students visit various works and make reports upon them, and after the fourth year six months of practical work in some machine shop (mechanical or electrical) is required under conditions approved by the secretary of public instruction and fine arts.

The Boletin, which is the official educational organ of the Mexican Government, contains, besides the reports already summarized, the discussions of proposed laws relating to education which were held in Congress and in the council of education, and also papers or articles upon educational and allied subjects under the title, "university miscellanies," which illustrate the scope and spirit of the work of the educational branch of the Government. No. 1 of the Boletin, for

example, contains a translation from the English of an article upon Froebel's pedagogy of the kindergarten and his ideas of games and toys; a translation of the discourse of M. Aristide Briand, minister of public instruction of France, upon the death of the great chemist Berthelot; a review of the year's progress in physiology, including bibliography, necrology, and an account of new discoveries and theories in the science (relating to circulation and respiration, muscular movements, the nervous system, and the various senses); a translation of Tichener's English version of Wundt's Physiological Psychology (introduction) by members of the Society of Psychological Studies, and essays in pre-Columbian (pre-Cortesian) American history. The subtitles of this historical series indicate the scope of the inquiry. They are: The American man, historical superstitions concerning his origin; his Asiatic origin according to the theologians of the sixteenth century; paleography and paleontology of the New World; American civilization.

The second number of the Boletin (July 20, 1907), opens with a discussion in the legislature of the executive report upon the manner in which the authority to act in educational matters, granted to the executive by the legislatiure, had been exercised by that branch of the Government the preceding year. This is followed by an interesting address by Licenciado Justo Sierra, secretary of public instruction and fine arts, upon the same subject, particularly explaining the changes which had been made in the course of studies in the so-called preparatory school and in the law and medical schools under the authority of Congress referred to. The secretary says that the executive has kept in view certain principles or rules in exercising the powers granted it by Congress. The grant expressly limited the changes to be made by the executive in educational matters, directing that only such subjects of instruction should be made obligatory as are indispensable for a practical career. All the subjects of the preparatory school were accordingly arranged with this end in view, theoretical studies which had occupied a prominent place in the course having been abandoned. These studies had been criticised at home and by foreigners as burdening the course with text-book instruction, matter which exercised the memory alone. Henceforth the objection can no more be made that the State should take charge only of primary instruction and leave professional studies to private enterprise. On the contrary, Secretary Sierra declares, the conviction of the Government is that national education is a public service of the first importance, and therefore the Government should take charge of it in all its grades and manifestations, through the entire life of every individual who is striving to open a future for himself, the effect of which effort is, in so far, to ameliorate the future of his country. In this way the child, the youth, and the adult man

come under the influence of the State in the exercise of its educative powers, and this direction of education, he adds, indicates the manner in which the powers granted it by the legislature should be exercised by the Government.

Returning to the preparatory school, Secretary Sierra repeats that its studies are now arranged with a view to educate the faculties of the students in a systematic way, whereby they may be enabled to select arms for the struggle of life. The studies are uniform, limited in number, and of a kind to place the students in the front of the present civilization. They must be taught to understand the immense current of events which civilization is developing before their eyes. For this purpose the scientific hierarchy adopted by Auguste Comte has been followed in preparing the courses of study. In no country of the world, he remarks, has the full didactic application of the scientific hierarchy in studies, proposed by Comte, been followed so fully as in the secondary studies of this school. According to this plan the fundamental sciences are studied successively. The secretary goes into details of the plan of studies of the school which can not be followed here, but it is noticeable that it was found advisable to exclude the ill-defined and disputable science of sociology from the programme, while instruction in psychology and general history, as having little practical value, was restricted to elementary notions of those studies.

The same disposition to modernize or render instruction practical is shown in the revision of the courses of the law and medical schools. Thus in the law school Roman law is now treated more from a historical standpoint, while sociology, which had been suppressed in the practical preparatory school, is included in the course of the law school, as also is its application—political economy. The principle which was kept in view in modifying the course in medicine, in conformity with the act of Congress, is explained to be the exclusion of special courses from the obligatory course. New specialties are forming every day and it is impossible to provide for them in the general medical course. Hence only those studies are to be retained as obligatory which form the physician and surgeon. But all the facilities for training specialists—laboratories, cabinets, such as are provided for bacteriological work including the study of the bubonic plague and cholera, etc., are prepared for students and physicians who wish to pursue special studies. A new course in dental surgery was opened in 1907. Similarly the course of the School of Arts and Trades has been modified, as its course of study above given shows, to keep the practical aim paramount.

The speaker took occasion to say that the unification of Mexico, which is still far from complete, can only be effected through the schools, and he spoke with confidence of the foundation of a national

university in the near future. It is interesting to note that the Mexican National Museum, under the direction of the ministry of public instruction, devotes much attention to the study of Mexican ethnology and archeology, including the preservation of archeological monuments, which are declared to be the property of the State. It also provides a course of study in ethnology and anthropology, including instruction in the native languages of Mexico.

Number II of the Boletin concludes with articles of general educational interest and the university miscellanies, the former including a report upon spelling reform, an essay upon the modern exuberant style, the intellectual movement in Madrid, a proposal to provide traveling expenses for writers and poets to prosecute their studies abroad, following the example of France, another proposal to provide suitable books for children, an account of the university for the people in Madrid, and a review of modern Spanish historical and literary works. The university miscellanies contain a translation of the address of the president of the American Association for the Advancement of Science (Prof. Calvin M. Woodward) at New York in December, 1906, upon the science of education, an article upon the education of children translated from the French of Dr. Marcel Braunschvig, some questions in philology, and a review of the progress of physical chemistry during the past year.

URUGUAY.

SUPERIOR INSTRUCTION.

The following information in regard to the University of Montevideo is taken from the report of Eduardo Acevedo, rector of the university for 1905.

In his inaugural address the rector calls attention to the change in the character of the instruction which is taking place at the university. It is to be henceforth less mechanical. Hitherto the memory has played too great a part in the method of instruction, and many students kept an eye only on the examinations in carrying on their studies. Henceforth the aim of the professors will be to awaken the energy and initiative of the students by putting them in the way of finding out things for themselves. Already a practical tendency has been given to all the branches of instruction in order to stimulate study and lessen fatigue. More commodious buildings have been constructed, with all the modern arrangements and conveniences.

The former system of examination, which permitted a student to neglect his studies until near the close of the year and then cram for

examination, has been so changed that the professors can give certificates of proficiency from the daily work of the pupils which they supervise.

Much space is taken up with reports of the professors upon the new system of examination, and upon the efforts which are being made in each faculty to give the instruction in that faculty a practical character. In the discussions it is noticeable that reference is made to the practice in other countries, and that quotations are made from Professor Münsterberg of Harvard, while Columbia, Harvard, and Yale are mentioned as affording examples of the method of giving the practical instruction which the modern university should furnish. This looking abroad for models of modern methods of instruction is now quite usual in South American countries. In furtherance of this practical tendency a new faculty of commerce has been formed, having among its professors specialists from Europe, while the old programmes of study have been essentially modified. The total number of books in the libraries of the various faculties was 85,806, besides 289 reviews.

PRIMARY INSTRUCTION.

Primary instruction is receiving increased attention in Uruguay, and the work of the Government authorities in response to the efforts of those who are striving to extend this branch of education is shown in an Annual Report by Dr. Abel J. Pérez, national inspector of primary instruction, which contains the official statistics and reports, and another work under the title of Annals, which contains a number of articles relating to education and national history, together with official documents relating to the administration of the schools. A brief review of the volumes relating to 1906 will give some idea of the movement of primary instruction in Uruguay in that year.

The author of the annual report, Dr. Abel J. Pérez, national inspector of schools, in his introduction to that work, states that whereas primary instruction has received but scant notice from influential people until very recently, it is now beginning to occupy the attention of legislators, as is shown by the increase in the number of bills introduced. The first of these mentioned appropriated funds to enable teachers to go to Europe and study the new schools of domestic economy, and such industrial or professional schools as could profitably be established in their own country. Another provided funds to enable teachers to learn English, in which language many works of high pedagogical value have been written; another proposed to amplify normal instruction; still another appropriated 1,000,000 pesos for the construction and repair of school buildings and the purchase of equipment, while others provided for salaries and for raising school funds.

These different propositions indicate an increased interest in primary instruction by the educated classes, and the author sees in them a promise for the future well-being of the schools. He goes on to point out that the function of primary instruction in old countries having an ancient and glorious history, which does not recount deeds of war alone, but also records achievements in science and the arts and the development of social morality, differs from the part it must play in new countries which have no history except that of war and conquest. These are colonial countries, whose cosmopolitan populations are composed of contingents from all the nations of the earth, besides a large infusion of the original natives, thus producing a confused mixture of races, creeds, and social ranks.

The old countries which are possessed of an atmosphere of high culture, the heritage of centuries, do not insist upon the importance and influence of the primary schools, because these schools model themselves naturally after the example of the national culture. The new countries, however, with their confused ethnic elements, their crude enthusiasms, and want of discipline, are justified in looking upon the primary school as the first and fundamental element of their national progress, whose function is to guide them into the paths which they must follow in the future and develop their minds and morals, in order to place them in the true way of civilization. The half-savage country boy who goes to his school ignorant of everything, yet weighed down by all the traditions, the superstitions, and the prejudices of the common people, undergoes there his first and most fundamental transformation. He does not go to the school merely to learn to read and write, but in the first place to change his ragged clothing for better, then learn to control the violent manifestations of his indomitable, wild nature, intensified by his wandering and free life, and develop a desire for a settled and domestic life, to which his nomadic existence has hitherto kept him a stranger. He will then be taught to revere the great men of former times who gave him the land he lives in, to love that land itself, and to learn its growth and progress and the obligations and duties of citizenship. He is next taught the marvelous results of human labor, the first secrets of science, especially those having some practical application to the affairs of life, and finally his relations to his fellow-men and to God.

In a word, the school prepares him to be an efficacious element of progress and civilization, because he, with his companions, in later years will fulfill an elevated social mission by converting the deserts into towns, the towns into cities, and the whole into a nation. The primary school being thus the first and indispensable influence in the formation of a collective civilized life, the new countries, whose populations are composed of a promiscuous mixture of all the nationalities

of Europe, together with natives, are justified in attaching the greatest importance to primary instruction.

The statistics given in this report begin with the private schools and are as follows. They relate to the year 1906:

Urban private schools	228
Rural private schools	61
Total	289

Considered from another point of view, they are classified into:

Lay schools	239
Religious schools	50
Total	289

There has been a notable decrease in this class of schools in the last three years, amounting to 82 schools, according to a table for the years 1904, 1905, and 1906.

The author warns us, however, that absolute faith can not be placed in these figures, as the private schools were not visited by an official inspector, and he points out the necessity of such inspection to see that the schools comply with the law and come up to the required standard. He intimates that many small private schools are taught by incompetent and ignorant persons.

The enrollment and attendance at these schools were as follows:

	1904.	1905.	1906.
Enrollment in private schools	22,622	17,794	17,232
Average attendance	17,375	14,499	13,939

The public schools numbered 619, divided as follows:

Urban public schools	218
Rural public schools	401
Total	619

The enrollment and attendance were as follows:

	1904.	1905.	1906.
Enrollment in public schools	50,350	53,040	57,638
Average attendance	31,621	36,839	41,462

This makes an increase of 7,288 in enrollment in two years. The proportion of attendance to enrollment was 63 per cent in 1904, 69 per cent in 1905, and 72 per cent in 1906.

The expenditure for primary instruction in the same years was $13.48 for each pupil enrolled in 1904, $13.96 in 1905, and $13.58 in

1906. For each pupil attending the figures were higher, viz, $21.45 in 1904, $20.11 in 1905, and $19.17 in 1906, decreasing with increasing attendance.

The total enrollment was as follows:

	1904.	1905.	1906.
Public schools	50,350	53,040	57,638
Private schools	22,622	17,794	17,232
Total	72,972	70,834	74,870

The expenditure for schools in 1905–6 was $794,468.49, which was 4.67 per cent of the total national expenditure for that year.

The report gives in detail the reports of the heads of the normal schools; the various proposals, decrees, and laws relating to school buildings (including an appropriation of $1,000,000 for new constructions); acts creating a commission on school hygiene, providing for inspection of schools, establishing night schools, schools of agriculture, school treasuries, and many similar subjects; and, finally, reports of the department inspectors. From all which it may seem that the declaration which Doctor Pérez, the national inspector, made at the beginning of the report, that a great impulse has been given to primary instruction in Uruguay, is justified.

THE "ANNALS OF PRIMARY INSTRUCTION."

The volume entitled "Annals of Primary Instruction," referred to at the beginning of this review, contains a brief biography of Dr. Francisco A. Berra, an eminent Uruguayan writer upon education, pedagogy, and the history of Uruguay; a continued article upon the primary school, by Doctor Pérez; an account of the primary school in Japan; a long criticism upon the proposed reform of the present Uruguayan law in relation to public education, and further articles upon the following subjects: Schools for instruction in household management, the graphic method in geometry, Dreyfus's object lessons, recent geographical investigations, history of Uruguay and civilization, inspectors of departments, the Crusades and their influence upon civilization; also a poem, a translation from the "Course in Morals" of Jules Payot, a translation of the report of the English royal commission on physical culture, besides sundry official reports, circulars, and programmes. The scope and character of the Annals may be inferred from this table of contents.

From the foregoing review it appears that primary education in Uruguay is being taken in hand seriously by able and earnest men.

PANAMA.

The following statistics of education in the Republic of Panama are taken from the Boletin de Estadística No. 2, September, 1907, published by the Government of that Republic, which gives the results of the school census of 1907. The figures are as follows, and indicate the mixed character of the population, the attendance at the date of the census, and the religion of the pupils:

Institutions.		Students.				
Class.	Number.	Catholic.	Non-Catholic.	Male.	Female.	Total.
National colleges	1	81	.....	81	.....	81
Private colleges	5	457	8	102	363	465
Normal schools	2	211	.....	159	52	211
Public schools of all grades	175	10,478	289	5,491	5,276	10,767
Private schools	18	271	339	356	254	610
Total	201	11,498	636	6,189	5,945	12,134

As to religion, 11,498 were Catholics, 621 were Protestants, 4 were Hebrews, and 11 were "Pagans," i. e., aboriginals. As to literacy, 7,769 could read while 4,365 could not; 7,138 could write and 4,996 could not. As to nationality, 11,441 were natives of Panama and 693 were foreigners; 5,261 were white, 3,049 were of aboriginal stock, 3,808 were negroes, and 16 belonged to the yellow race.

The teaching force consisted of 165 men and 168 women teachers in the public schools and 35 men and 28 women in the private establishments. This gives 1.66 schools and 3.18 teachers to every 100 pupils.

CHAPTER IX.

EDUCATIONAL EXHIBITS AT THE JAMESTOWN EXPOSITION.[a]

MAY–DECEMBER, 1907.

The distinguishing features of the Jamestown Exposition, aside from the Government display, were historic and sociologic. Under the latter head are included the educational exhibits which, through failure of the original plans, were scattered in several buildings. Fortunately the greater part of this material was placed in the two wings of the auditorium, which occupied a central position, facing on the north the water front and the new Government pier, and on the opposite side overlooking "Lee's Parade," which was enlivened daily with military displays.

The university and college exhibits occupied the east wing of the building, and those of secondary and primary education the west wing. The area covered by each wing was only about 11,000 square feet, and hence the exhibits were limited in number and extent as compared with those of great expositions like the Louisiana Purchase Exposition, for instance, in which the exhibits of New York and Missouri, with that of the city of St. Louis, occupied about 11,000 square feet.

The great advance that has been made in this country in the art of presentation was shown by the simple but admirable installations in both wings of the auditorium, as also in the original scheme of collection. The aim had been to avoid, as far as possible, repetitions—an overpowering show of methods and of pupils' work in the case of schools, or of equipments and activities in that of higher institutions—and to bring together typical exhibits, each of which should illustrate some special feature of American education, and their combination make up a fairly complete presentation of its aims and achievements. This was also the principle on which our educational exhibit was collected for Paris in 1900, but it was worked out on quite different lines at Jamestown.

Although, as always happens in such enterprises, the original purpose was not fully realized it was kept in view and gave character to the material as finally arranged. It was instructive because typical.

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[a] Reported by Miss Anna Tolman Smith, of the Bureau of Education; member of the international jury on elementary education, Paris Exposition, 1900, and Louisiana Purchase Exposition, 1903.

EXHIBITS PERTAINING TO HIGHER EDUCATION.

The exhibits of colleges and universities fell naturally into two groups: One included institutions of the prerevolutionary period and that immediately following; the other, modern institutions. In the first group emphasis was placed upon the relations of the institutions to the mother country and to the founders of the Republic. It included the College of William and Mary, the second in our country, founded in 1693, half a century later than Harvard, which was not there represented; Pennsylvania University, dating from 1740; Columbia, 1754; Dartmouth, 1769; Rutgers, 1771; Hampden-Sydney, 1783; Washington College (now Washington and Lee University), chartered in 1807, but in actual existence as Liberty Hall Academy in 1776. Yale, chartered in 1701, was simply represented in this group by a model of its campus and buildings, the full exhibit of the university being included with other collections from Connecticut in the "States Exhibits" building.

All of the institutions named were in operation before our independence as a nation was achieved, and though widely separated and originating under different circumstances, they had that community of interests which, at all times and everywhere, has made the higher education a strong bond of union between men and nations. Unity in diversity was a striking lesson of the early records of these institutions, which, by persevering effort, had been collected in rich profusion.

Without violence to historic truth the University of North Carolina may be included in this prerevolutionary class, as it owes its existence primarily to a clause in the State constitution adopted December 18, 1776, although it was not chartered until December 11, 1789. By these two events the founding of the university is associated with the most memorable years that mark the origin of our national life.

The period immediately following the Revolution began auspiciously for education with the final adoption of Jefferson's plan for a university. In 1819, and largely through the persistent efforts of Cabell,[a] whose name will ever be associated with that of Jefferson in this great enterprise, the act establishing the University of Virginia was passed by the legislature of that State, and seven years after the institution was opened for students.

The twenty-five succeeding years were marked by great activity in Virginia in the cause of higher education. Four colleges for boys and numerous academies sprang up during that period. The colleges, which were all represented at Jamestown, were due chiefly, but not exclusively, to the zeal of the various religious denomina-

[a] Joseph Carrington Cabell, member of the Virginia house of delegates, 1809–1811, and of the State senate, 1811–1829.

tions. Randolph-Macon, the oldest of the four and the oldest Methodist college in the United States, was chartered in 1829, and has become the crown of a unique system of schools, including, beside the original college, the present Randolph-Macon College for women at Lynchburg, two academies for boys, situated respectively at Front Royal and Bedford City, and an academy for girls at Danville. The relation of these institutions to the parent college was indicated at the Exposition by grouping photographs of their presidents around that of the chancellor. Emory and Henry, opened in 1838, by its name and its attention to oratory perpetuates in a very practical manner the memory of its two eminent founders, whose portraits adorned the section. The two remaining colleges were Richmond College, opened in 1832 as Virginia Baptist Seminary and incorporated under its present name in 1840; and Roanoke College, the outgrowth of a private seminary for the benefit of the Anglo-German population of West Virginia, chartered as a college under the auspices of the Lutheran Church in 1853, and marked from first to last by a liberal and tolerant spirit.

In respect to the number and novelty of historic memorials, William and Mary naturally excelled all the other colleges exhibiting. According to the "Priorities" inscribed on a wall chart, this was the first college in the colonies to receive a charter direct from the King, and the first and only one that received its coat of arms from the College of Heralds in London. The devices of these insignia are now borne by the seal of the college.

Evidences of continued royal favor were presented in the copy of a proclamation issued by William III, in 1700, calling upon the governor-general of the colony of Virginia, "to doe whatever lyes in you for ye due encouraging of ye sd college."

Early affiliations of William and Mary with colleges in the other colonies were indicated by a photographic copy of a page from the records of the Phi Beta Kappa society, showing the grant in 1779 of a society charter to Yale by the original fraternity organized at William and Mary in 1776.

It was from this college, and in accordance with powers conferred upon it by its charter, that Washington, in 1749, received appointment as surveyor for Fairfax County. The form of bond executed on this occasion was in the collection of early records; also a leaf from the book of the Bursar, John Blair, jr., giving the debit and credit account of Thomas Jefferson, from March 25, 1761, to June 10, 1762; a list of students, scholars, and their negro boys, boarding in the college in 1754; and a page from the faculty book showing the diploma of master of arts awarded to Benjamin Franklin.

Among historic documents in the exhibits of sister colleges were the charter of Dartmouth and records relative to the project of its

founder, Eleazar Wheelock, for the education of Indian youths; the charter and early diplomas of Rutgers, and specimens of the lottery tickets issued to raise funds for its maintenance; and the copy of a document signed in 1764 by the archbishop of Canterbury, authorizing the persons named therein to solicit contributions in England for Philadelphia College, which expanded later into the University of Pennsylvania.

Of even greater significance than these memorials of origins and early activities were those more directly connecting the institutions with the men and events that laid the foundations of our national existence.

The portraits exhibited by William and Mary included those of Washington, who was chancellor of the college in 1794, and, among distinguished alumni, Peyton Randolph, President of the Continental Congress; Jefferson, Monroe, Tyler, and John Marshall, and for a later period Gen. Winfield Scott.

The "Priorities" claimed by the college showed the influence of Jefferson, who was a member of a committee appointed in 1776 to revise the constitution of his alma mater. The bill embodying his suggestions was not passed, but their effect was seen in the adoption by the college in 1779 of the elective and honor systems, and the establishment in the same year of courses of instruction in municipal and constitutional law, modern languages, and political economy. In fact, the beginning was here made of plans that received their full development forty years later in the University of Virginia.

To the leaders of the revolution whose names are inseparably associated with William and Mary must be added Patrick Henry, whose portrait was displayed in the exhibit of Hampden-Sidney in memory of his trusteeship of Prince Edward Academy, from which the college developed; Frelinghuysen, inseparably associated with Rutgers, and 10 signers of the Declaration of Independence, whose names were significantly underlined on a large copy of that document, included in the memorials presented by the University of Pennsylvania.

The list might have been greatly extended if every prerevolutionary college had responded to the call for portraits, or even if all that responded had joined in a collective exhibit.

The university exhibits illustrated also in a striking manner that saying of Emerson, "An institution is but the lengthened shadow of one man." Jefferson was the commanding idea in the exhibit of the University of Virginia. Here were seen his portrait and statue, a magnificent view of the university campus and buildings on which were lavished his passion for scenic effects, and extracts from his plan for a university setting forth those distinctive features of a university organization, the elective system, specialized schools, and student self-

government, that have since been adopted, in whole or in part, by every institution of that order in the land.

In like manner the University of Pennsylvania did honor to Franklin. A portrait bust of the philosopher crowned the splendid exhibit of the university departments—the medical school, the department of archeology, the Towne Scientific School, the Wharton School of Finance and Economy, the engineering school—every one of which, by its comprehensive scope, scientific method, and practical applications, preserves, as it were, the stamp of his complex genius.

The Dartmouth exhibit centered in memorials of Webster. His noble countenance was the feature of its portrait group, and on a table below were volumes rehearsing the story of that legal contest in defense of its charter rights which won for him the title of refounder of the college.

The University of North Carolina was represented by a fine view of the buildings and site on Chapel Hill, marked by the imposing shaft erected by the alumni of the university, in memory of its first president, Dr. Joseph Caldwell. He was a graduate of Princeton University and a man of deep religious convictions; and he implanted in this pioneer university of the South that reverence for religious truth and that regard for intellectual thoroughness which, from the first, made it a powerful influence in restraining the extravagant tendencies of scientific speculation.

The predominance in the college portraits of men distinguished as national leaders gave emphasis to two representatives of that literary culture which completes, in universities, the alliance of science, philosophy, and art. Virginia university contributed a portrait bust of Poe, and in its chart of salient facts named him as "the most widely known alumnus of the university," who has immortalized the surrounding scenery in many of his stories. In the group of honored alumni of Dartmouth appeared the youthful countenance of Richard Hovey, his eyes intense with the spirit of youth and poetry.

It was the intention of the officials in charge of the educational section of the exposition[a] to set forth the historic origins and modern developments of our higher institutions and the relation of universities—especially of State universities—to the public schools of the country. The second of these purposes was naturally involved, more or less, with the first, but two universities stood forth in a peculiar way as the exponents of the modern spirit. Johns Hopkins marked its distinction as a university of graduate study and research by plates, charts, and monographs illustrating the work in morphology and in historical and archeological research, and by a beautiful series of photographs of the solar spectrum.

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[a] Hon. J. Taylor Ellyson, governor, and Dr. J. A. C. Chandler, director of history, education, and social economy, Jamestown Exposition.

Carefully protected in a glass cabinet were many valuable objects pertaining to investigations carried on by this university. Among these were noted, in particular, ancient tablets with cuneiform inscriptions accompanied by translations; also, an example of the delicate diffraction gratings, one of the most important inventions that this country has contributed for scientific uses. It was the work of Professor Rowland,[a] whose name is identified with the phenomenal development of the university itself.

The work of Johns Hopkins in the field of historic research was emphasized by a bronze medallion, commemorating in fine relief the destruction of Henrico College, the forerunner of William and Mary, by the Indians, in whose interest it had been founded. The medallion was presented by the Colonial Dames of America, and reflects great credit upon their artistic taste and judgment.

The only State university responding to the call for material was the State University of Ohio at Columbus. In a series of alcoves there was presented a most complete, thoroughly classified, and speaking exhibit of each of the six colleges and the scientific museums of this institution.

In addition to printed matter setting forth the history and general plan of the university, photographs showing the class rooms, laboratories, library, etc., and concrete illustrations of the work in applied science, there were volumes of theses and class exercises, by means of which students of other institutions could readily estimate their own work and achievements. The relation of the university to the public schools of the State was indicated by a map on which was marked the location of every high school on its accredited list.

The spread of modern ideas in education in the far South was illustrated by the exhibit of Tulane University, which dates its origin from the medical school established in 1834, although the university organization was not accomplished until 1884.

The photographic exhibit of this university included, besides the colleges of arts and sciences and technology, Newcomb Hall, and the beautiful grounds of the H. Sophie Newcomb College for women.

The movement for the higher education of women was illustrated by the admirable exhibits of Woman's College of Baltimore, Vassar College, and Randolph-Macon College for Women.

One of the most interesting exhibits was that of the Southern Female College, of Petersburg, Va., which met the request for historic souvenirs by a collection of rare books, examples of antique furniture, and a fine cabinet of ceramics. The labels attached to the latter made up an interesting annotated catalogue. Increasing facilities for the

[a] For an account of this invention see Physical Papers of Henry Augustus Rowland, Ph. D., LL. D., professor of physics and director of the physical laboratory in the Johns Hopkins University, 1876–1901. (Part iv, Light, 29–33.)

education of young women were indicated by a fine model of the proposed new buildings for Sweet Briar Seminary, at Bradford, Va., the erection of which is made possible by a recent endowment.

In this comprehensive section the industrial relations of higher education were suggested by a collection of photographs, models, and classified products, and by an extensive map showing the great trade routes of the world, which made up the exhibit of the Commercial Museum at Philadelphia.

By their typical character these several exhibits brought clearly to view a striking characteristic of the old education. The stress of education in the early period of our history was on the ideals and principles that should govern private conduct and public affairs. The men who passed through the colleges were leaders because they appealed to convictions and aspirations that were common to all. With the multiplicaton of professional careers higher education has necessarily become more and more specialized; at the same time the public schools have become important factors in molding character and public opinion; hence special departments of the theory and art of education find their place with other professional schools in universities. In view of this development the most significant of the exhibits in the university group was that of Columbia University, New York. Passing over its ancient history and its phenomenal growth in students and equipment, this university exhibited only the work of the Teachers College, which was founded in 1888, and in 1898 was made a part of the educational system of the university, ranking with the other professional schools. The exhibit of this college, with its Horace Mann practice schools, gave opportunity for studying the highest ideals pertaining to the training of teachers that have been put to practical tests in this country. The material comprised both programmes and explanations setting forth with much detail the reasons for and the immediate aims of each lesson and exercise; photographs showing classes at work and their equipment; and also selected exercises, indicating the manner in which the lessons are developed by the student teachers, and reproduced by the pupils in the Horace Mann practice schools.

This completeness of presentation was particularly noticeable in respect to the art work and industrial work included in the course of study.

The ever-increasing scope of the efforts of this university in respect to popular education was indicated by the statement that credit for work in agriculture at Cornell University will be given to candidates for the teachers' diploma at Columbia.

EXHIBITS PERTAINING TO SECONDARY AND ELEMENTARY SCHOOLS.

The exhibits of elementary and secondary education, which occupied the west wing of the auditorium, related in the main to present activities, although here and there, incidentally, as it were, some historic suggestion met the eye, like the model of St. John's Church, Richmond, in which Patrick Henry gave utterance to the memorable words, "Give me liberty or give me death." The model was the work of boys in the seventh grade of the Richmond schools.

The material in this section fell naturally under three heads: Exhibits of private schools; select exhibits of public schools; collective exhibits of public schools. Noticeable in the first class were the Jacob Tome Institute, Port Deposit, Md., and the Chicago Kindergarten College. The former, which is the most richly endowed secondary school in the country, was represented by a large photograph of the buildings and grounds overlooking the Susquehanna River, and an illustrated pamphlet setting forth the very complete organization, material appointments, and faculty of the school.

The exhibit of the Chicago Kindergarten College, by its presentation of principles and their application in a graded series of class exercises, formed an admirable complement to that of Teachers College of Columbia University. The exercises that had been worked out in the college classes were not limited to those suitable for the kindergarten stage alone, but included a scheme of hand work for public schools from the first to the eighth grade, inclusive, forming a natural transition from the kindergarten to the ordinary school. One of the most interesting features of this scheme was an illustration of the study of color harmonies.

The relations of the class exercises and class work to the theory of education, which underlies the training in this school, were made clear by the printed course of study with accompanying texts. The pamphlet explained briefly, but explicitly, the methods by which the entire institutional world is made an instrument of human development even in the earliest stage of formal training.

The select exhibits of public schools offered an elaborate illustration of results achieved under the direction of well-trained teachers. They comprised class work from the public schools of St. Louis, Boston, and Rochester, N. Y., covering the entire curriculum, and an exhibit from the public schools of Minneapolis, pertaining to the course in drawing only.

In the St. Louis section the material was arranged by grades, and thus emphasized the progressive development of the course of study. In the Boston section the arrangement was by subjects of instruction, which showed at once the method of treating each branch and the unity of the series. The class work from the Rochester schools was

planned to illustrate, in particular, the principle of correlation, which is very consistently maintained in the schools of that city. A feature of great interest was the development of nature study from grade to grade.

The general plan was the same throughout this group of exhibits. They included printed courses of study; the daily time tables, showing the relative value of the several subjects in the course; typical class work displayed in wing frames, and bound volumes representing the work of entire classes. The normal schools, which are the guiding and inspiring forces in the respective cities, were included in the exhibits.

The Minneapolis exhibit was instructive by reason of its limitation to the branch that pertains to all constructive and decorative arts. It showed the excellent results that are accomplished by a sound theory of art exemplified in a progressive series of lessons. Each stage had a definite aim, but each led naturally to the next higher, and thus esthetic development and practical skill were kept in perfect harmony. Indirectly, this presentation indicated the mischief of those misdirected, or undirected, efforts which too often pass for art training.

In the class of collective exhibits were included the entire system of public schools in the States of Ohio, Missouri, Virginia, West Virginia, and North Carolina, and limited exhibits from South Carolina and Georgia.

It would be needless here to dwell upon the exhibits from the principal cities in this collection, for they repeated, with varying degrees of excellence, the kind of exercises and pupils' work shown in the select exhibits. There is, indeed, a noticeable likeness in the general system and methods of city schools throughout the country, due no doubt to the thorough organization of city systems, and the close relations and constant interchange of plans and opinions maintained by city superintendents.

Because of the trend of recent discussions, attention was directed to signs of progress or of new departures in rural education. Naturally, Ohio and Missouri could only show a continuance of the activity in this respect that was so effectively set forth at the St. Louis Exposition.

In the former, State agricultural clubs and traveling libraries are supplementing the work of the common schools. Missouri has a new law making attendance obligatory in the larger cities during the entire school term. One-third of the counties in this State, as was stated in the record of progress, are maintaining their schools for at least eight months in the year. The average school tax levied by local school authorities in 1905–6 amounted to 65 cents on each $100 of valuation, although the law authorizes only a tax of 40 cents on $100, excepting by special vote of the people of the district.

But the surprising feature of the group of collective exhibits was the evidence of growth in public school sentiment and activities in the South Atlantic States. This is not confined to cities like Richmond or Atlanta, but is a general awakening, the result of a vigorous campaign conducted from county to county. It was indicated by exhibits of consolidated rural schools in Virginia and North Carolina; of agricultural high schools in Georgia; and by the phenomenal increase and improvement in country schoolhouses. Virginia had 154 rural high schools in 1906 and 303 in 1907.

One of the most interesting documents in the section was a pamphlet on the improvement in rural schoolhouses and grounds in North Carolina from 1900 to 1906.[a] Beside facts and figures, it presented contrasting pictures of old and new schoolhouses, and it abounded in pithy sayings from public-spirited men, like the lamented Charles D. McIver, who was an inspiring leader in this movement. The pamphlet describes the unique plan of a loan fund to aid school districts in the work of building schoolhouses, provided for by the legislature in 1902, and gives an account also of the remarkable work of the woman's association for the betterment of public schoolhouses throughout the State. A second pamphlet treated of the significant facts in the educational progress of this State from 1900 to 1906.[b]

Virginia made a similar, though more condensed, presentation by means of a statistical chart, which told the whole story at a glance; and Missouri presented a very comprehensive statistical survey of its schools and higher institutions.

These tabular statements, together with select charts and diagrams from the exhibit of the Bureau of Education, are appended to this paper, not only for their intrinsic value, but also to illustrate an effective exposition device.

For obvious reasons the development in the material resources of the schools has been much more rapid than in the conditions of efficiency in the actual work of instruction. The need of teachers fully competent to train the young, and especially the need of teachers prepared to take up the newer branches of study, is everywhere felt. Recent and rapid industrial developments have increased the consciousness of this need in the South. Many of the newer branches which must be included in the elementary school course, as drawing, manual training, etc., have as their distinct purpose skill in doing; if they fail of this result, the time given to them is wasted, or worse than wasted, in aimless exercises.

In view of the rapid increase in the provision of public schools and the extension of their scope, peculiar interest attaches to the few

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[a] By R. D. W. Connor, Department of Education, Raleigh, N. C.

[b] Educational Bulletin IX, by Charles L. Coon. Some account of the agencies that have been instrumental in bringing about the recent educational activity in the South is given in Chapter XI of this report. Still another chapter (Chapter XII) contains a memorial notice of Doctor McIver, with many of the "pithy sayings" referred to in the text.

institutions for the training of teachers represented in the group of collective exhibits. Prominent among these was the Winthrop Normal and Industrial College of South Carolina, which had its origin in the Winthrop Training School for Teachers, established in Columbia in 1886, being the pioneer training school for teachers in the South Atlantic States. This training school was supported in part by an annual appropriation of the State legislature. Additional help was given it by an annual appropriation by the trustees of the Peabody fund, for whose president, the Hon. Robert C. Winthrop, the school was named.

In 1891, by an act of the South Carolina legislature, the school was taken over by the State and organized under the present name. A liberal appropriation was made for buildings and equipment, and in October, 1895, the college was opened in its present quarters at Rock Hill.

All the departments of the school—academic, normal, and industrial—were represented by prospectuses, or views, or class work, in the exhibit. The normal department has the advantage of a practice or model school annex, and there were evidences of careful attention to the problems of industrial training in common schools, both as regards theory and practice.

Another institution whose exhibit deserves special notice was the State Normal and Industrial College for young women at Greensboro, N. C. The high standard, the system, and the finished excellence of its work, seemed a fitting testimonial to the spirit and instruction of Principal McIver, who gave to this institution the largest measure of his noble efforts in behalf of popular education. It is the only institution in the State in which young women receive, gratuitously, higher education and professional training, and hence, naturally, is the center to which the State must long look for its most efficient teachers.

The two institutions named, with the State normal school of Georgia and the agricultural and mechanical college of North Carolina, are working at local problems of industrial education with results of far more than local interest.

ADDITIONAL EXHIBITS PERTAINING TO EDUCATION.

Although the material collected in the two wings of the Auditorium pertained chiefly to the Southern States, it was noticeable that the only suggestion of provision for the education of the colored race was a portfolio of views from Hampton, and the statement on the Virginia chart of appropriations for colored schools. The omission was due to the fact that a separate building was provided for exhibits pertaining to the negro race. In this building were concentrated

the exhibits of the institutions and schools maintained in their interest, as well as the products of their skill and industry. Here were to be found, together with the work collected from elementary schools, exhibits from Hampton, Tuskegee, and Fisk and Howard universities, which were similar in kind to those of corresponding institutions for the white race. Of greater interest than the photographs, cabinets, volumes of class exercises, and the concrete products of the industrial departments displayed by these celebrated institutions, were the charts and pamphlets setting forth, in brief, the story of their origin and marvelous growth. From Hampton, 1,369 negro graduates and over 5,000 ex-students have gone out as teachers, farmers, craftsmen, and home makers. An impressive feature of the Fisk University exhibit was a map of the United States with dots marking the places where its graduates are at work. It is estimated that from 15,000 to 20,000 colored children are taught yearly by those who have been trained for the work at Fisk University. Tuskegee is helping directly in the solution of great economic problems by furnishing men and women trained in various branches of skilled industry, and, what is even more important, awakened to a full sense of the mission of homes in a nation's life.

For some reasons the separation of these exhibits from the general exhibit of education was unfortunate, for the institutions to which they pertained are dealing in a very practical way with many new problems in education of widespread interest. But there was one advantage in the arrangement: It emphasized in a very striking manner the significance of higher education—the education that prepares teachers, preachers, physicians, leaders of industry—in the uplifting of the race.

Among other separate exhibits was that of the Virginia Polytechnic Institute at Blacksburg, which occupied rooms in the arts and crafts building, and gave daily demonstrations of the practical work of several of its departments.

The very complete and admirably classified exhibit of education in Massachusetts, including public schools, academies, colleges, and universities, occupied a room in the Massachusetts State building.

The interior decorations and furniture of the North Carolina building formed a unique exhibit of the native woods and the native arts of weaving, cabinetmaking, and wood carving and inlaying, developed from their primitive forms to a high degree of utility and beauty by art and craft training.

New eras are marked by new interpretations of the saying, "Education for life." This fact was illustrated at Jamestown by the somewhat incongruous collections in the States exhibits building. Here, amid an overpowering profusion of the fruits of the earth and of our manufactured products, were placed educational exhibits from sev-

eral States, of which two, namely, those from Connecticut and New Jersey, were complete and thoroughly classified.

Whether by conscious design or through the mere impulse of the time, emphasis was placed in these exhibits upon those departments and agencies that relate most directly to our industrial development —the art work, the commercial branches, the engineering and agricultural schools, experiment stations, trade schools, etc. But there were included, also, the bureaus of factory inspection, the good-roads systems, and other public works for the social betterment.

This outlook toward the general welfare was the unifying element in this vast and varied collection. It indicated at once the highest uses of our material wealth and of education for industrial efficiency. At the same time it emphasized anew the ever-increasing need of teachers capable of arousing in the young the desire for social service, as well as of preparing them for industrial efficiency.

From the States exhibits building, the visitor passed readily to the social economy building, which was given over entirely to exhibits of agencies that have for their immediate object the relief of the defective and dependent classes of society, or that in various ways supplement and extend the work of the schools. To the former class pertain the exhibits of schools for the deaf-mute, the blind, and the mentally defective, which were not only instructive to persons engaged in the work, but very suggestive to elementary teachers in general, by reason of methods exemplified in the class exercises, or in the explanatory pamphlets pertaining to the same.

But this class of exhibits has been made familiar by successive expositions, while those pertaining to the agencies that are intended to supplement or extend the work of organized schools were either quite new to exposition collections, or, if not new, have been hitherto so scattered and fragmentary as to make little impression upon the observer.

The material of these exhibits consisted chiefly of photographs, pamphlets, and wall placards setting forth salient features of the work to which they chiefly related.

Among the agencies represented were the juvenile court of Cook County, Ill.; the work of Colorado in child saving and reformation, including the juvenile court of Denver; the work of the Indiana State board of health in behalf of children; the Playground Association of America, and the council of Jewish women and their work for children.

The Carnegie Library of Pittsburg presented typical literature for children, and a circular of information concerning the training school for children's librarians.

The Antituberculosis Association had a large exhibit, including many pamphlets giving instructions as to the means of preventing

contagion, directions for the sanitation of buildings, suggestions as to the medical inspection of school children, etc.

Among interesting pamphlets circulated was a bulletin by the American School of Home Economics, setting forth the nature and scope of its work, and instruction for lunches for rural schools, by Mrs. Ellen H. Richards, of the Massachusetts Institute of Technology.

The children's school garden and farm building was in close proximity to the social economy building, and at some distance was a model playground for children, all of which were treated as a part of the general social economy exhibit. The main building contained a hall where lectures, illustrated with stereoscopic views, proved a popular and instructive feature.

These exhibits indicate the many and varied agencies at work to promote the general social welfare. So far as they relate particularly to children they are indispensable supplements to the schools; but they can not replace the latter, nor can they as a rule be managed within the same organization. They relate to special or temporary needs and conditions, and are often effectual in proportion to the freedom and elasticity of their operations. One important result of collecting together exhibits of this nature[a] was the impression they left of the inherent distinction between their aims and methods and those that make for the best results in the work of systematic education; at the same time many points of contact between the work of these agencies and that of the school were suggested.

The exhibit of the National Bureau of Education, which occupied a small section in the Government building, consisted principally of statistical charts showing the progress of education in the United States during the last three decades, as regards the increase in the number of schools and higher institutions, the attendance upon the same, and the resources at their command. From a very interesting collection of photographs of school buildings exhibited by the Bureau, it appears that the increase and improvement in schoolhouses, already referred to in the case of a few States, has been very general throughout the country.

The statistical charts were practically the same as those exhibited at St. Louis, with the data revised and brought down to the present date. The charts relating to normal schools are reproduced among the appended tables.

Experience shows that photographs, graphical diagrams, and statistical charts are the most effective material in an educational

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[a] The collection and plan of these exhibits were accomplished by the persistence of the official to whom this section was assigned, Miss Minnie Bronson, of Fayette, Iowa, chief of Social Economy.

exhibit. Pamphlets dealing briefly and pointedly with timely problems and movements of current interest always command attention. With regard to the general scheme of an educational exhibit, it may be said that collective exhibits are chiefly valuable for their effect upon the communities from which they are drawn, the efforts which they stimulate and the comparisons that they suggest having a lasting value for those immediately concerned in their preparation; on the contrary, typical exercises and carefully selected views showing school interiors, classes at work, etc., are most instructive to teachers and actual students of education.

The distinction between the two classes of exhibits, i. e., collective and typical, was well maintained at Jamestown, and the value of the latter, especially in a small exposition, was very fully demonstrated.

TYPICAL STATISTICAL CHARTS.

[From the Virginia public school exhibit.]

Educational progress in Virginia shown by statistics.

	Sessions 1905–6.	Sessions 1906–7.
Chart A.		
1. Number of schoolhouses built	167	245
2. Expended for schoolhouses	$257,607.00	$789,094.00
3. Private subscriptions for public school buildings	$13,675.00	$43,014.00
4. Local revenue for school purposes	$1,303,840.00	$1,430,997.00
5. State funds	$1,128,262.00	$1,328,475.00
6. Total pay of division superintendents	$58,393.00	$72,793.00
7. Average salary of division superintendents	$503.38	$627.52
8. Average rate of local taxation per $100 in 478 country school districts	$0.23	$0.27
9. Number of districts levying less than 25 cents, per $100	289	217
10. Number levying 40 cents and over, per $100	47	63
Chart B.		
1. Number of high schools in State (most of these are new schools formed by consolidation)	154	303
2. Number of high school teachers	394	575
3. Number of two-teacher schools (most of these are new schools formed by consolidation)	534	609
4. Number of additional teachers in consolidated schools	107	276
5. Number of male teachers in State	1,527	1,576
6. Average length of term (white schools)...months	6.64	7.09
7. Average increase in length of term...do		.45
8. Average salary per month (white teachers)	$34.00	$35.20
9. Average maximum salary (white teachers)	$65.67	$79.18
Chart C.		
1. Number of teachers' associations	80	126
2. Number of citizens' leagues	171	189
3. Number of pupils transported to school in wagons	258	643
4. Number wagons used in transporting pupils	11	31

NEGRO EDUCATION.

1. Since 1870 the State has spent $10,000,000 on the education of the negro.
2. Amount of State school taxes now paid by negroes is $76,026 per year.
3. Amount Virginia spends annually for negro education is $322,000.

[From the North Carolina exhibit.]

SEVEN YEARS' INCREASE IN APPROPRIATIONS OF NORTH CAROLINA TO EDUCATION.

The following tables show the increase in State aid to education for 1907 over 1900 and for 1907 over 1905. All these sums are appropriated directly out of the State treasury.

State appropriations to education, 1905 and 1907.

Name of institution.	1905.		1907.	
	Annual support.	Buildings and repairs for two years.	Annual support.	Buildings and repairs for two years.
Deaf, Bumb, and Blind Institution	$60,000	$15,050	$60,000	$23,100
University of North Carolina	45,000	50,000	70,000	50,000
Colored normal schools	14,000	.....	[a] 24,000	.....
Croatan Normal School	500	.....	1,250	.....
Agricultural and Mechanical College, Raleigh	25,000	5,000	32,000	63,000
Agricultural and Mechanical College, Greensboro	7,500	7,500	10,000	9,000
Normal and Industrial College	40,000	[b] 112,000	70,000	50,000
Cullowhee Normal School	3,000	3,500	4,000	10,000
Deaf and Dumb School	42,500	5,000	46,000	8,500
Public schools and rural libraries	200,000	.....	200,000	.....
Appalachian Training School	2,000	4,000	4,000	10,000
High schools	.....	.....	45,000	.....
Eastern Training School	.....	.....	5,000	15,000
Spray School of Technology	.....	.....	5,000	.....
Total	439,500	202,050	576,250	238,600

[a] This includes $10,000 annually for buildings at Elizabeth City, Winston, and Fayetteville.
[b] Includes appropriation to replace burned buildings.

Increase for annual support, $136,750.

Increase for buildings, etc., $36,550.

No account is taken of funds derived from the North Carolina department of agriculture or from the United States for the support of the agricultural and mechanical colleges.

State appropriations to education, 1900 and 1907.

Name of institution.	1900.		1907.	
	Annual support.	Buildings and repairs for two years.	Annual support.	Buildings and repairs for two years.
Deaf, Dumb, and Blind Institution	$52,500	$30,000	$60,000	$23,100
University of North Carolina	25,000	7,500	70,000	50,600
Colored normal schools	14,000	.....	[a] 24,000	.....
Croatan Normal School	500	.....	1,250	.....
Agricultural and Mechanical College, Raleigh	[b] 10,000	5,000	[b] 32,000	63,000
Agricultural and Mechanical College, Greensboro	[b] 5,000	.....	[b] 10,000	9,000
Normal and Industrial College	25,000	5,000	70,000	50,000
Cullowhee Normal School	1,500	.....	4,000	10,000
Deaf and Dumb School	40,000	7,000	46,000	8,500
Public schools and rural libraries	100,000	.....	200,000	.....
Appalachian Training School	.....	.....	4,000	10,000
High schools	.....	.....	45,000	.....
Eastern Training School	.....	.....	5,000	15,000
Spray School of Technology	.....	.....	5,000	.....
Total	273,500	49,500	576,250	238,600

[a] Includes $10,000 annual appropriation for buildings for colored normal schools and $1,250 for Croatan Normal School.
[b] Includes no funds from United States or North Carolina department of agriculture.

Increase for annual support $302,750.

Increase for buildings, etc., $189,100.

[From the Missouri exhibit.]

Public school statistics of Missouri for 1906.

Number of children 6 to 20 years old	994,226
Number enrolled in primary schools	725,238
Number enrolled in high schools	29,825
Number of teachers	17,704
Average length of terms.....days..	150
Average rate of levy	.65
School funds:	
(*a*) Special district	$120,115.95
(*b*) Township	3,997,608.63
(*c*) County	4,804,391.70
(*d*) University or seminary	1,224,801.64
Total	13,326,141.32
Enrollment in normal schools	4,900
Number of students in university	2,292
Number of professors, instructors, and assistants in university	180
Number of departments in university	11
Income of university	$478,697.00
Receipts, including money on hand, for primary, secondary, and higher schools (estimated)	15,000,000.00
Appropriations by legislature:	
(*a*) Primary and secondary schools	1,173,110.00
(*b*) Normal schools (1907), biennial	1,162,005.00
(*c*) University (1907), biennial	920,000.00
(*d*) Special schools (1907), biennial	803,350.00
Total appropriations, biennial	4,058,465.00

[From the exhibits of the United States Bureau of Education.]

EDUCATION OF TEACHERS IN THE UNITED STATES.

Enrollment of normal students in the several classes of institutions in 1906.

	In normal schools.	In high schools.	In universities and colleges.
North Atlantic Division	22,165	4,487	2,501
South Atlantic Division	5,108	1,905	1,700
South Central Division	8,526	2,824	2,812
North Central Division	28,153	4,290	5,703
Western Division	4,985	1,043	1,055

Public appropriations to normal schools, 1890–1906.

Year.	For maintenance.	For buildings.
1890	$1,312,418	$900,533
1891	1,285,700	409,916
1892	1,567,082	394,635
1893	1,462,914	816,826
1894	1,996,271	1,583,399
1895	1,917,375	1,003,933
1896	2,187,875	1,124,834
1897	2,426,185	743,333
1898	2,566,132	417,866
1899	2,910,934	560,896
1900	2,769,003	718,507
1901	3,068,485	709,217
1906	4,643,365	1,549,906

Students pursuing certain studies in public normal schools in 1906.

Subject.	Number pursuing it.	Per cent of total enrollment.[a]
History of education	10,736	18.07
Theory of education	11,723	19.73
School organization and supervision	11,036	18.57
School management and discipline	14,634	24.62
School hygiene	12,814	21.56
Psychology and child study	15,343	25.82
Ethics	2,929	4.93
School laws	9,429	15.87
Practical pedagogy	14,891	25.06

[a] Total number of normal students, 59,429.

CHAPTER X.

REPORT OF THE SECOND INTERNATIONAL CONGRESS ON SCHOOL HYGIENE.

HELD AT LONDON, AUGUST 5 TO 10, 1907.

[Among the most important results of the increase of scientific knowledge are the efforts to provide public supervision over the hygienic and sanitary condition of communities. In these efforts the imperative need of such service in connection with the public schools, and of making the schools media for diffusing knowledge upon these subjects, has been distinctly recognized.

The marked success of the First International Congress on School Hygiene, held in Nuremberg in the month of April, 1904, in bringing together workers of all countries, representing different aspects of the subject, and in giving an impetus to the work, has already been signalized by increased literary activity in nearly every country.

The Second International Congress on School Hygiene, which was held in London in August, 1907, was characterized by the exact formulation of the several divisions of the subject and their consideration in separate sections. The various ways in which the schools may conduce to the physical well-being of pupils and to the progress made in the countries represented in the congress in establishing some form of hygienic or medical inspection of schools were very clearly brought out in the general sessions.

The preparations for the congress stimulated in our own country organized efforts for promoting the interests to which it is related, an effect which it is believed will be increased by the following report of the proceedings of the congress prepared by the delegates accredited thereto as national representatives.]

NEW YORK, *November 29, 1907.*

Hon. THEODORE ROOSEVELT,

President of the United States.

SIR: The undersigned, delegates of the American School Hygiene Association to the International Congress on School Hygiene in London, and further appointed by the Department of State to attend this congress, respectively beg to submit the following report:

The congress was held in London from August 5 to August 10, 1907, at the Imperial Institute at South Kensington, and was very successful, there having been some 2,000 persons in attendance. The meetings of the congress excited considerable attention and were given reasonable space in the London press. The congress consisted of general sessions and the meetings of sections. These sections were eleven in number and dealt with the various aspects of school hygiene in its broader sense. The sections were as follows:

1. The Physiology and Psychology of Educational Methods and Work.
2. Medical and Hygienic Inspection in School.
3. The Hygiene of the Teaching Profession.
4. Instruction in Hygiene for Teachers and Scholars.

5. Physical Education and Training in Personal Hygiene.

6. Out-of-School Hygiene. Holiday Camps and Schools. The Relation of Home and the School.

7. Contagious Diseases, Ill-Health, and other Conditions affecting Attendance.

8. Special Schools for Feeble-Minded and Exceptional Children.

9. Special Schools for Blind, Deaf, and Dumb Children.

10. Hygiene of Residential Schools.

11. The School Building and its Equipment.

The most important various impressions which we received from the congress were as follows:

1. It was evident that the congress was an expression of a general development of public interest in matters affecting the public welfare, and is a phase of what we have seen in this country in the vigor of the crusade against tuberculosis, the laws on meat inspection, the war against patent medicines, and the pure-food laws.

The subject was taken seriously by the delegates in attendance, and these delegates included representatives from every country in Europe, from some Asiatic countries, such as Japan, and from New Zealand, Australia, Cape Colony, the Argentine Republic, and other countries. The impression was very strongly conveyed that there was a world-wide movement in favor of improved school conditions.

2. The congress was officered by persons of importance in social, political, medical, and educational work. In the absence of His Majesty King Edward VII, the congress was opened by the Earl of Crewe, president of the council, and among the presidents of the sections were Prof. William Osler, of Oxford; Sir James Crechton-Browne, Rt. Hon. Lord Kinnaird, Sir Shirley Murphy, Thomas E. Colcutt, esq., and persons of equal importance.

The Marchioness of Londonderry was president of the ladies' reception committee, and the standing of the congress in the community was controlled by these persons, who not only allowed their names to be used, but took an active interest in the congress.

3. The delegates attending the congress were persons of importance, consisting of doctors of standing in their various localities, superintendents of instruction, and educators of eminence, many of them being persons whose names are known wherever the subject of the welfare of school children is studied.

The assembling of some thirty representative delegates, one from each country, on the evening of the opening day presented a very striking body of men, who would have attracted attention in whatever country they might have appeared as being men of brains and power. Each delegate spoke, and each one said practically the same thing, namely, that school hygiene was progressing in his country, but that the obstacle lay in the unwillingness of the legislative bodies

to contribute sufficient financial support to carry it out as it should be carried out.

4. The most prominent part in the London congress was taken by doctors rather than by educators or laymen.

5. The general character of the papers and discussions tended to elevate the whole subject, to carry the matter further forward, and to enlighten everyone interested in the subject. * * *

There were no American exhibits in a very extensive exhibit of school methods and sanitation from all over the world. There were very few American delegates present. Among some two hundred and fifty papers there were some six or eight by American authors. We regret to find that the general impression of the status of American school hygiene existing abroad was not particularly favorable, nor do we think quite just. We respectfully present these impressions for your consideration.

We present below a brief analysis of some of the more important papers which are accessible to us through the medium of some preliminary transactions which have been published. We do this for the purpose of showing the scope of the congress and the character of the papers. It seems to us that a perusal of these abstracts will suggest very strongly that America, to say the least, is not one of the leaders in school hygiene. In our opinion the most urgent matter for those interested in the subject is to inform the public as widely as possible as to the true value of school hygiene, and to call attention to the fact that America does not hold the place which she should. Any real progress in the matter will depend upon the public, for the public makes the laws and provides the money, and the movement can not proceed in advance of the point to which the public is educated.

We would, therefore, ask your influence, if you agree with us, in presenting to the public of the United States the very great value which it should attach to making school conditions as good as they can be made. The economy of school inspection, for example, is so obvious that it needs only to be presented properly to be appreciated. Much work in this line has already been done in this country, but its value has not been expressed by a wide adoption of the conclusions which are necessitated by the figures brought out.

Lord Crewe, in the address with which he opened the congress, said that he hoped that the meetings might leave some permanent mark on the subjects, and that the deliberation of the congress would do much to advance the knowledge of school hygiene and to remove what all must regard as having been a serious blot on the civilization of the world. Lord Londonderry in following him dwelt on the importance of school inspection. Sir Lauder Brunton in his presidential address said that it was better to spend money on keeping children in good condition than in pensioning old people.

A resolution offered by the American School Hygiene Association was as follows:

Whereas the maintenance and development of the health and vigor of school children is a matter of paramount importance, and whereas experience in all large cities has shown the importance of health inspection: Be it

Resolved, That in every city and town adequate provision should be made both for sanitary inspection of schools and for medical inspection of school children, the latter to include not only inspection for contagious diseases, but also of eyes, ears, teeth, throat, and nose, and of general physical condition.

This resolution was opposed by some of the English delegates on the ground that it was unnecessary and merely asserted what was already accepted, but very few American communities are yet prepared to carry out the provisions of this resolution.

The other resolutions passed were as follows:

Whereas the improvement in the health of and the hygienic conditions surrounding school children depends largely upon the intelligent operation, the competency, the interest, and the faithfulness of teachers and principals in matters of hygienic importance: Therefore be it

Resolved, That all schools having courses for the training of teachers should give instruction in:

(*a*) Personal and school hygiene; and

(*b*) The principles and practice of physical training.

And that to each of these subjects should be given as much time as the major subjects in the course.

That this section is of the opinion that the principles and practice of hygiene should form part of the education of every citizen.

That practical and theoretical instruction in personal and school hygiene should form a regular part of the curriculum of all institutions in which students are trained to become teachers in schools of all grades.

That, in the opinion of this congress, it is important to secure the prompt exclusion from school of scholars suspected to be suffering from or likely to convey infectious sickness, and that the board of education be urged to devise some means by which this can be done without as at present involving financial loss on the local education authority.

In the opinion of this meeting it is desirable that all secondary schools, including public schools, should be subjected to inspection on matters relating to hygiene and sanitation, and that a copy of this resolution should be forwarded to the president of the board of education praying him to take such steps as he may consider necessary to carry such inspection into effect.

The following resolution was passed in the section by 50 votes to 1, but by an oversight was not reported at the general meeting of the congress:

Objective instruction being far less fatiguing to the memory and much better fitted to invigorate the intellectual powers than instruction which makes use of words only, it is desirable that systematic arrangements should be made for enabling both teachers and pupils to have constant access to sources of natural knowledge, including museums.

The Third Congress for International School Hygiene will be held in Paris in three years. It is evident that if America is to take a fore-

most position in the matter it will soon be necessary to invite the congress to this country. * * *

The American Society for School Hygiene is prepared to undertake a campaign of publicity with a view of pursuing the only course that we believe will produce the desired result, the course to which we have already so often alluded, namely, the education of the public without making demands which are radical enough to excite their opposition, but calling their attention to the fact that they will not be conducting a new experiment in adopting school inspection and similar measures, but that it has been already worked out on an elaborate scale for many years in Europe, and that we have much to learn from this European experience.

We recognize that the conditions for the adopting of a uniform system in this country are not so favorable as in most European countries. We have here to deal with the legislative bodies of each State or town instead of with a central board of education with power to enforce regulations. We believe, however, so firmly in the good sense of the American public that it is our opinion that if the facts and the economics of the situation are presented to them in simple terms, a wave of public sentiment will be aroused sufficiently strong to place the matter of school hygiene on an entirely different basis than from that now existing.

We append below summaries of some of the more important papers.

We are, very respectfully, yours,

HENRY P. WALCOTT.
ROBERT W. LOVETT.
LUTHER HALSEY GULICK.

ABSTRACTS OF IMPORTANT PAPERS.

METHODS OF THE FIRST AND SUBSEQUENT EXAMINATIONS OF SCHOOL CHILDREN.

By W. L. McKenzie, Medical Member of Local Government Board of Scotland.

There are two factors of the examination—sanitation of the environment and health of the individual. From the examination of the child light is thrown on the home conditions. The importance of the card of the original and subsequent examinations, with the place for the home conditions as dwelt on, helps the health authorities.

At the first examination in Edinburgh (10 per cent of the total number being reckoned as entering) it was reckoned that the examination would take two hundred days, examining twenty a day and allowing ten minutes for each examination.

The author saw 30 children examined in one and one-half hours at Wiesbaden with the help of a teacher. The German subsequent examinations come every second year. The author advises examination at 8 or 9 years and another at 11 or 12. The minimum requirement is for two subsequent examinations for the eye and ear and the organs of the chest.

In Glasgow tables have been issued by the Scotch educational department with the height, weight, and physical condition of over 72,000 children, collated by the teachers. In the training of the teachers seventy hours of theoretical and practical instruction in personal and school hygiene are required. See the reports of the Scotch department of education.

The schedule issued by McKenzie consists of 14 heads, with 75 points calling for observation or inquiry.

METHODS OF MEDICAL EXAMINATION OF SCHOOL CHILDREN.

By M. le Dr. Mery, Member of the Faculty of Medicine, Paris, Physician to the Hospitals.

There should be an examination at the entrance to school life:

(1) Measurements of the weight, height, chest, and of strength by the dynamometer.

(2) Physiological examination of sight and hearing.

(3) An examination of the general condition, throat, glands, teeth, skin, hair, bones, spine, thorax, heart, and lungs.

Fifteen to twenty minutes is required by an expert for this examination, and exposure of the back is necessary.

Subsequent to this, once each term, the children, with their cards, file before the inspector and he examines again those for any reason appearing to require it. Subsequent examination should be reduced to a minimum. Measurements should be taken frequently by the teachers.

Doctor Mery asks for the appointment of a commission to prepare averages for use in the examinations.

LIGHTING AND VENTILATING OF CLASS ROOMS.

By Sir Ashton Webb.

The writer goes into the discussion of the cubic space required, methods of ventilation, etc. It is stated that the time required to contaminate the air in the class room of an elementary school, allowing 10 square feet of floor space per scholar, is eight minutes.

The temperature should be from 56° to 60° Fahrenheit.

THE SCHOOL IN ITS RELATION TO TUBERCULOSIS.

By Arthur Newsholme, M. D., F. R. C. P., Medical Officer, Brighton.

1. Is tuberculosis spread in the elementary schools?
2. Do school children develop latent tuberculosis?
3. Should children be trained to help in fighting tuberculosis in the next generation?

From 5 to 15 years of age fewer deaths occur from pulmonary and other tuberculosis than at any other period until after 75. There are 7 deaths from tuberculosis out of every 10,000, of which pulmonary tuberculosis only causes 3. Assuming that there are 10 cases existing for every annual death, 3 children in every 1,000 would have pulmonary tuberculosis, on the basis of the last decennial report.

Analyzing the figures, which vary wherever they are taken, the author comes to the conclusion that about 1 in every 300 children has diagnosticable tuberculosis of the lungs. Probably these children are not a serious source of infection, for they do not expectorate and they drop out of school early. Teachers are a possible source of infection, as there is probably more pulmonary tuberculosis among teachers than in the community in general. He thinks that the school might be made an important center of control of tuberculosis by adopting the following measures:

1. A medical examination at entrance and subsequently.
2. Special care as to the feeding and hygiene of children in tuberculous families, including the avoidance of fatigue.
3. Frequent wet cleansing of school rooms.
4. The reduction of overcrowding.
5. Improvement of ventilation and warming.
6. Exclusion of tuberculous children.
7. Care of personal hygiene, with special reference to adenoids and teeth.
8. Periodical examinations of school-teachers and care takers.

THE SCHOOLROOM AS A FACTOR IN TUBERCULOSIS.

By Prof. William Oldright, Professor of Hygiene in the University of Toronto.

Tuberculosis is undoubtedly prevalent among school-teachers. In Canada in 1881 and 1883 an analysis of the returns showed that teaching was one of the occupations most frequently attacked. Late figures from the United States census are significant. The ratio of deaths from consumption in 1,000 deaths was:

Of all males engaged in all occupations	154
Of all male teachers	184
Of all females engaged in all occupations	215
Of all female teachers	256

The causes are to be found in foul air and possibly chalk dust. The remedy is obvious.

THE SCHOOLROOM IN ITS RELATION TO THE DURATION OF LESSONS, THE SEQUENCE OF SUBJECTS, AND THE SEASONS OF THE YEAR.

By William H. Burnham, M. D., Ph. D., Professor of Pedagogy, Clark University, Worcester, Mass.

The recitation period should not exceed fifteen to twenty minutes for children from 6 to 9; twenty-five to thirty minutes for children from 9 to 12; thirty-five to forty minutes for older children, with recesses of five to fifteen minutes following. The evidence shows the wisdom of putting mathematics and languages in the morning and gymnastics and drawing in the afternoon.

Hygiene justifies a long vacation in the summer and a short one in the spring.

Much further study and more correct figures are needed.

FRENCH VIEW OF THE SAME SUBJECT.

By Professor Chabot, Professor of Education in the Faculty of Letters at Lyon.

1. The school should be a source of intellectual profit and should not cause physiological injury. Therefore the school ought to ask the doctor and the teacher to cooperate.

2. There is no exact and precise uniformity as to the duration of lessons, but the average duration is as follows:

	Minutes.
From 7 to 10 years	15 to 30
From 10 to 14 years	30 to 45
From 14 years up	60 to 90

With the necessary intervals, the day's work is as follows:

	Hours.
From 7 to 12 years	6
From 12 to 15 years	7
From 15 years up	8

3. In general the mental effort depends more on the teachers and methods than upon the schedules. In general, however, abstract subjects are difficult.

4. Seasonal influence is not great.

5. Exact science is more and more necessary to the teacher, but insufficient to fix the routine of school work. Educators ought to place a science always more and more exact at the service of an art always more and more original and personal.

AUSTRIAN VIEW OF THE SAME SUBJECT.

By Burgerstein, Austria.

The writer insists on the difficulty of getting reliable and uniform results from observations. No lesson should be longer than three-quarters of an hour in high schools, with rest after lessons. The first lessons of the day might be longer than the later ones, but this is not often practicable.

The 6-year-old child should not sit over one-half hour without exercise and rest. The writing exercise should be intermitted every five or ten minutes by some corporal movement at the desk or by rest. For higher standards writing should not last longer than half an hour. It would be better for college students not to sit over forty minutes in succession.

Attention is called to the need of further study of the whole subject.

Sir James Crichton Browne made a scholarly address, as president, on the Importance of Physiology, and especially Psychology in Educational Work.

THE BEARING OF SCHOOL WORK ON HEALTHY-MINDEDNESS.

By Sir James Sully.

The author makes a plea for a sound intellectual training. He criticises the modern school in its results, in that in some it produces a dreamy, impractical state of mind, and a tendency to read sensational newspapers and novels rather than things requiring mental effort. There is less tendency to conversation than formerly on serious subjects, less importance is attached to the truth of statements, and a tendency to accept inaccurate statements on authority.

The remedy lies in an attempt to cultivate methodically a vigorous tone and attitude of the intellectual faculties. The attention should be directed to this improved attitude rather than to an increased store of information, thus method is more important than amount. A closer contact between teachers and pupils is needed.

He suggests continuation schools to prevent school influence ending when school is over. In these he would work for less formal class teaching and more formation of critical judgment, subjecting these to the ordeal of orderly criticism.

A COMPARISON BETWEEN THE TRAINING GIVEN BY THE CLASSICS AND MODERN LANGUAGES.

By the Rev. Hon. E. Littleton, Head Master of Eton.

Latin affords the best gymnastic training, especially if versification is included. If French and Latin are taught together they overlap, unless French is taught orally with care as to the accent, which introduces a new educational factor. Latin and Greek books afford better subject-matter than French or German. The former give better ideals in politics to British boys.

The value of languages in later life is not taken into account in this paper, their educational value alone being discussed.

TEN YEARS' OBSERVATION OF THE SCHOOLS IN ANTWERP.

By Doctor Schuyton.

1. The child entering the ordinary schools undergoes physical and psychical depression.

2. The growth of muscular power is not regular during the school year, there being a depression in March.

3. Muscular power depends on the season.

4. Voluntary attention decreases from January to July and increases from October to December.

5. Fatigue is increasing from one end of the year to the other, without valuable recovery of energy during the holidays.

6. School children spend intensively their senses with abnormal results. They are incapable of following regularly the lessons. They finish their education incompletely prepared for life. All of these phenomena are caused by insufficient application of all hygienic conditions and of physiological and psychological laws dominating normal life, and by insufficient knowledge of child nature.

Antwerp is a city of 300,000 inhabitants, with complete medical inspection, school baths, and a paidological laboratory. The conditions are estimated by the writer as not being ideal, but he thinks it would be hard to find better conditions as to school life than exist there. The trouble, he believes, is due to defective hygienic conditions prevailing in school life in all civilized countries.

MEDICAL SUPERVISION OF SECONDARY SCHOOLS IN SWEDEN.

By G. Törnell.

In 1868 a medical officer was attached to all public schools. The duties of the inspector are at present:

1. To examine scholars medically as to the state of health of each.
2. To prevent the spread of infection.
3. To supervise the sanitary conditions of the school premises.
4. To prevent scholars from being overburdened by lessons.
5. To attend indigent children free of charge when ill.
6. To draw up statements on any questions that may arise with regard to school hygiene, and to render periodical reports of his work.

An expert in hygiene is available for consultation with the supervisory board.

Every child, in order to enter a public secondary school, must have a certificate of vaccination, and a certificate that he is not physically or mentally defective to such an extent as to interfere with his work or injure other children. Each pupil is then examined, including the eyes and ears, once a year, and a written report is made. The examination is made as much oftener as is necessary.

The medical officer has to furnish a certificate before a child who has recovered from an infectious disease can return to school. He must spend at least one hour a week on the school premises, to afford advice to the master and pupils and to observe the pupils at their work, how they sit, etc., and he must supervise school gymnastics once a month. In case he disapproves of the curriculum as to overwork or improper proportions of leisure and work, he reports it to the head master. When new buildings are erected, he, or some specialist in hygiene, must see the conditions as to hygiene are fulfilled.

As to schools, there must be plenty of space around the buildings for outdoor games. The gymnasium must have a dressing room and bathroom and douche, and swimming must be taught in the summer. Each pupil must have 6 cubic meters of space and $1\frac{1}{2}$ square meters of floor room. Text-books must be properly printed.

These provisions went into effect in 1905.

METHOD OF EXAMINATION IN THE LOWEST CLASS OF PUBLIC SCHOOLS IN LEIPZIG.

By Doctor Thiersch.

1. There is no examination by the teachers of sight and hearing at the beginning of the second half year.

2. The doctor's examination takes in one class at a time. The parents are invited to be present by a printed circular explaining the object of the examination. When they assemble at the appointed time, the medical inspector gives a half hour's talk on hygiene, choosing one of the following subjects:

(*a*) Cleanliness of body and baths.
(*b*) Cleanliness of the mouth and care of the teeth.
(*c*) Proper nourishment.
(*d*) Properly aired sleeping rooms.
(*e*) Proper clothing, including corsets.
(*f*) Games and sports.
(*g*) The alcohol question.

Much interest has been taken in these talks by the parents. Each child, with loosened upper clothes, is then taken separately to the physician in a small room, who examines the child in the presence of the mother and teacher, the former giving information about the child. The examination includes throat, teeth, hair, lungs, if necessary, spine, and skin. These, with data as to eyes and ears and general bodily characteristics (height and weight) and the facts of value learned from the parent are put on a card. This card goes with the child from class to class as he progresses through the school, for

the information of the teacher. If conditions are found requiring medical treatment the parents are advised to take the child to their physician.

The examination takes from one and one-half to two hours for 40 children. A system of further examinations is to be formulated, especially for children who are not found in satisfactory condition at the first examination.

MEDICAL INSPECTION IN THE COMMUNAL SCHOOLS OF NICE.

By Cæsar Roux, Medical Inspector of Schools, Surgeon to the Children's Hospital.

A pamphlet is published in two parts, (1) for the use of the scholars, and (2) a sanitary schedule or health card for the inspectors. The part of the pamphlet which is put into the hands of the scholars contains:

1. The conditions of admission of new pupils, with a reference to exclusion from the school from illness.
2. Information about the pupil not objectionable to the parents, such as name, age, birthplace, residence, date of vaccination, weight, height, chest diameter, and athletic sports.
3. A place for dates of absence from the school, which is filled out by the teacher.
4. Hints on hygiene, such as the importance of fresh air and light, baths, proper care of the hands and nails. Suggestions not to spit on the floor, or carry pencils in the mouth, with information that tuberculosis is thus transmitted. Instructions not to change hats with each other, not to smoke, and not to drink. Certain of the suggestions as to the bad effect of work under pressure would seem better adapted to teachers than scholars.

The card of health for the inspectors contains the name, general condition, date of vaccination, and information concerning the pupil's lungs, heart, skin,and hair, intellectual condition, preceding illnesses, sight, teeth, nose, throat, ears, and infirmities.

The staff consists of the medical inspector, an oculist, an aurist (also taking care of the nose and throat), a skin specialist, and a dentist. If a child is ill he is sent to the school specialist. Prophylaxis forms a part of their duty.

AN ACCOUNT OF THE CITY CLINIC FOR THE TEETH IN STRASSBURG.

By Professor Doctor Jessen, Strassburg.

Not less than 90 per cent of school children have trouble with their teeth. Regular examination of the teeth of school children was begun at the university clinic in 1897 and was continued in that way for two years. For two years more the teeth were attended to at

the schools, but that proved unsatisfactory, and then an agitation was begun for a school clinic, which was opened in 1902, being the first in Germany. From 1903 to 1906, inclusive, from 17,000 to 18,000 children were treated each year. The cost in 1907 was 9,000 marks, or $2,250. Children from 3 to 6 who seek school admission must be treated, and no child is admitted to the holiday colony without a certificate of a sound mouth. More than half of the children went to the clinic on account of toothache. The results as formulated by one of the teachers are as follows: Absence from school on account of toothache is much diminishing; the lightening of the burden for such children is noticeable; the health of the children who had frequent toothache is improved.

The clinic visits are generally outside of school hours and school work is not much interrupted. Frequent visits to the school are not necessary. The teachers believe in the clinic and not much opposition is encountered from the parents.

Prof. T. D. Wood, professor of physical education in Columbia University, made a plea for the instruction of teachers in hygiene and sanitation. One-tenth to one-eighth of the time should be devoted to this subject for two years where teachers are trained, and an adequate preparation should be required from all teachers.

Prof. John Edgar, of St. Andrew's University, discussing the same subject, said that the joint committee of university training centers in Scotland provides that "the course of professional training shall include attendance at an approved course in personal and school hygiene, to extend over a period of two terms of at least ten weeks each, and to include thirty to fifty hours' instruction." This includes not only lectures but visits to schools and study of their equipment from a hygienic point of view, physical observation of children, and practice in tests of sight and hearing. A course in physiology is also required.

THE PLACE AND LIMITATIONS OF FOLK DANCING AS AN AGENCY IN PHYSICAL TRAINING.

By Dr. L. H. Gulick, Director of Physical Training in the Public Schools, New York City.

The adequacy of athletics as ordinarily organized is well enough for boys, as they are able to carry on something of the sort in later life. For girls, however, they are inadequate, and provide no future line for activity. Selected folk dances are gymnastic in effect, present the emotions and feelings of races who formulated them, and therefore rest on a racial basis. They are developmental medically, they improve coordination, and give grace, balance, and sense of beauty.

HOLIDAY CAMPS.

By Doctor Thomassen, of Copenhagen.

Brion, of Zurich, in 1876 took a large number of poor children from Zurich to the country. In 1878 the movement of vacation camps was taken up by Frankfort, and now "there is hardly any larger city in Austria or Germany that does not every summer send its poor and sickly school children out camping for about three or four weeks."

In France they are working for vacation camps and have a special newspaper for the purpose. Since 1881, 34 to 38 per cent of the children in the public schools of Copenhagen have been sent to the country for vacations. This comes about in one of three ways: (1) Country folks invite their relatives; (2) farmers open their doors to city children; (3) in the last year a number of vacation camps were opened as a result of the agitation of the teachers' associations. To one of these teachers' associations the Government has granted a twenty-five years' lease of a public forest for the purpose. Railroad corporations (Government and private) and steamship companies give free transportation in all cases both ways. In 1906, 17,400 children were furnished such free transportation under the direction of the city schools.

LOWER LIMIT OF AGE FOR SCHOOL ATTENDANCE.

By Arthur Newsholme, Medical Officer of Health, Brighton.

Mr. Newsholme is inclined to think that the lower limit should be raised to six years, as in Germany. In England and Wales one-tenth of all children in elementary schools are under 5. This raises the question whether one-tenth of the school expenses, or anything approaching this amount, should be spent on children under 5. He estimates roughly the amount spent for the year 1904–5 on this one-tenth of the children as $8,750,000. The general consensus of opinion is that there is little educational advantage in this. The dangers are in breathing polluted air and contracting infectious diseases.

Observations at Dundee showed that the air in naturally ventilated schoolrooms was worse than that, not only of dwelling rooms, but also of the bedrooms of the poor.

In an epidemic of measles in Brighton nine-tenths of the primary cases occurred in children from 3 to 5 attending the public schools.

"No formal instruction before 5" is the burden of modern English opinion.

SPREAD OF MEASLES.

By Dr. C. J. Thomas, Assistant Medical Officer of the London County Council.

1. Measles, except in the better-class districts, only spread in classes under 5 years of age, about 75 per cent of the children being protected.

2. When a class accumulates 30 to 40 per cent of the children not having had the disease, it spreads when it begins until the proportion is reduced to 15 to 20 per cent unprotected.

3. If children under 5 were excluded from school the spread of measles in connection with school would probably cease for the present, but if this were successful in postponing attacks the spread of measles in school at an older age would occur in a few years' time.

4. If the school is to be closed up, to be useful the closure must occur before the first crop falls; to wait until the attendance falls to a certain limit does no good and the closure will be ineffectual. According to Davies, in a paper on the same subject, closure to be effectual "must be within ten days of the first attendance of the initial case in an infectious state."

5. Sanitary buildings and the training of teachers are of great importance in limiting measles.

6. Circulars to mothers should be sent where measles occur in a class, calling attention to the significance of colds.

7. Since 1905 in London, and of late in Croydon and Brighton, children who have had measles, but where there are measles in the family, are not excluded from school in the senior departments.

SPECIAL SCHOOLS FOR DEFECTIVE CHILDREN.

By R. C. Elmslie, Assistant Medical Officer of the London County Council and Assistant Surgeon to the Metropolitan Hospital.

Eight years ago in London the first invalid center was opened for the instruction of children unable to attend the larger schools on account of infirmity. There are now 23 such centers with 1,802 children on the rolls, the schools being situated all over London. Each holds from 40 to 100 children, who are sent for each day and fed at noon. There is an examination for entrance to such schools, and the children are obliged to remain until they are 16 years old.

Three classes must be provided for:

(*a*) Children with tuberculosis of the bones and joints.

(*b*) Fixed deformities and paralysis.

(*c*) Chronic heart and lung diseases.

The criticism made by the author is that these schools do not see sufficiently that efficient medical and surgical treatment is carried out and that the results are satisfactory. He estimates that 20 per cent of these children will earn their living at a trade later in life, 50 per cent if specially skilled work can be found, while 30 per cent will be unable to support themselves.

CHAPTER XI.

THE CONFERENCE FOR EDUCATION IN THE SOUTH AND THE SOUTHERN EDUCATION BOARD.

By Rev. G. S. Dickerman,
Agent of the Conference.

Contents.—General object and character of the Conference.—Personnel of the meetings.—Participation of Northern people.—The means adopted for the systematic gathering and disseminating of information.—Action regarding colored schools aided by Northern contributions.—The impulse to organize and the evolution of the Southern Education Board.—Subsidiary agencies of the Board; methods of the directors.—Attitude of the Fifth Conference.—The response throughout the South.—Memorial service for Doctor Curry.—Representation of the State Departments of Education.—The duty of the State to the negro.—Waymarks of progress: High schools; compulsory education; agricultural education; local activities.—Auxiliary organizations of women.—The Pinehurst Conference a convention of educational leaders.—The services of the Southern Education Board.—A review of five years: Financial progress; schoolhouses; consolidation of schools; high schools; industrial training; school libraries; training of teachers; supervision; meetings and school improvement leagues.—Deference to Southern leadership.—A dominant national spirit.—Statistics of educational progress.

GENERAL OBJECT AND CHARACTER OF THE CONFERENCE.

In the Report of the United States Commissioner of Education for 1903, the eighth chapter is on The Educational Movement in the South, prepared by Prof. Wyckliffe Rose. That chapter gives an excellent account of the quiet beginnings of the Conference for Education in the South and of its rapid development to a position of influence and power. It also describes the circumstances attending the formation of the Southern Education Board, and tells of its design, which was to be a kind of permanent organ of the Conference. It is unnecessary for this paper to dwell at length on these particulars, but it will narrate the continuance of the movement during the subsequent period and mention some incidental events.

These Conferences, unlike many assemblies, have been general in their object rather than particular. They have aimed at interchange of thought more than at crystallization of thought into definite decision. Few resolutions have been offered except those of routine or of courtesy, and voting has been eliminated so far as practicable. This has given great freedom and a rare spirit of concord, while it has saved the Conference from artificiality.

The places of meeting[a] have determined to some extent the character of the assemblies, and as these places have been distant from one another and quite dissimilar in their features, the several Conferences have shown a like dissimilarity. In passing from the seclusion of Capon Springs to the atmosphere of the Moravian College at Salem with the business stir of adjacent Winston, the contrast was indescribable. It was like coming from the woods into a thoroughfare, and the meeting changed at once from a tone of academic meditation to the downrightness of earnest endeavor. In going the next year to Athens, the seat of the Georgia University, another change was experienced. As a native Georgian, now a resident of New York, expressed it: "Here for the first time the Conference is really in the South," and it might have been added, here for the first time the people of the North and of the South flowed together, entirely forgetting all differences in mutual recognition and a common enthusiasm. At Richmond, the old Confederate capital, there was another manifestation equally significant, a newly aroused consciousness of the magnitude of southern interests and a deepening sense of responsibility for intelligence in all the ranks of American citizenship. In 1904, at Birmingham, Ala., the chief manufacturing center of the South, the gathering was in a business atmosphere and had a business character; values were dwelt upon, material, social, moral, and spiritual, and the question was how these might be enhanced. The move to Columbia, S. C., meant a transition to the State where traditions are most revered and innovations most dreaded, with the inevitable result of criticism and the increased power that comes of vindication. The choice of Lexington, Ky., in 1906, carried the assembly beyond the Appalachians and far toward the North, into a region which hitherto had been but little influenced by the movement. In this capital of the Blue Grass country the dominant note was education for rural life and the secret of agricultural prosperity.

The Conference of 1907 at Pinehurst, N. C., was held in the "Carolina" hotel, and in this respect was a partial return to the manner of the earlier meetings at Capon Springs. While very much larger than those meetings, and remarkably representative of the entire South, the social opportunities were such as to encourage the freest intercommunication among those in attendance and to impress all with the solidarity of their common interests.

One effect of the wide distances between the different places of meeting has been a comparatively new assembly on each occasion.

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[a] The meetings of the Conference have been held as follows: First (1898), Second (1899), and Third (1900), at Capon Springs, W. Va.; Fourth (1901), at Winston-Salem, N. C.; Fifth (1902), at Athens, Ga.; Sixth (1903), at Richmond, Va.; Seventh (1904), at Birmingham, Ala.; Eighth (1905), at Columbia, S. C.; Ninth (1906), at Lexington, Ky.; Tenth (1907), at Pinehurst, N. C. The Eleventh Conference (1908) will be held at Memphis, Tenn.

The lists of those who were at the three Capon Springs meetings contain the names of 130 individuals. Not more than thirty or forty of these were in attendance at Winston-Salem, and only these few, out of the many hundred who thronged the halls of the college there, were personally acquainted with what had been done before. The printed roll of "Registered members" of the Ninth Conference at Lexington contains 875 names, of whom 625 were from Kentucky, 77 from adjacent States, 76 from New York and the East, and less than 100 from other parts of the South.[a] This list includes most of those who came from other communities, but not many of the Lexington people who crowded the Auditorium to the number of 2,000 or more. As these visitors were largely from within the boundaries of the State, the audiences were so completely Kentuckian that those from a distance were but the merest sprinkling. Probably not over 100 had been at any of the previous Conferences. Thus the Conference in each case has become an expression of the peculiar spirit and life of the State in which it has been held. At Winston-Salem it was a North Carolina expression, at Athens a Georgia expression, in Richmond a Virginia expression, in Birmingham an expression of Alabama, in Columbia of South Carolina, and in Lexington an expression of Kentucky character.[b]

PERSONNEL OF THE MEETINGS.

In all these meetings the voices of southern men have spoken with authority. The presiding officer at the First Conference was Bishop T. U. Dudley, of the Episcopal diocese of Kentucky, who from a professor in the University of Virginia had become an officer in the Confederate army, and after the war had risen to eminence in the southern church. The event which especially distinguished the Second Conference was the address of Dr. J. L. M. Curry. This address would have had weight anywhere by reason of the thoughts it contained and the eloquence of their presentation, but its power here lay in the fact that he expressed the ripe convictions of one who had been a leading spirit in southern affairs throughout his long and honored life. Hardly less significant was the impression made by President William L. Wilson, who was influential in the Second and Third Conferences. At the Third Conference he was an invalid, enfeebled

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[a] The Register gives addresses as follows: Kentucky 627, New York 54, Ohio 34, Virginia 27, Tennessee 25, Alabama 16, North Carolina 11, Missouri and Connecticut each 9, South Carolina and Georgia each 8, Illinois 6, West Virginia and Massachusetts each 5, Pennsylvania 4, Louisiana, Texas, and the District of Columbia each 3, Maryland, New Jersey, and Rhode Island each 2, Arkansas, Mississippi, Nebraska, Indiana, Iowa, and Canada each 1.

Of course no account is here made of visitors who failed to enroll their names and addresses, so that the tabulation is only approximate.

The occupations of those enrolled are given as follows: Heads of institutions 61, other teachers 323, school superintendents 55, governors 2, lawyers 11, merchants 11, bankers 4, manufacturers 2.

[b] The Pinehurst Conference alone, on account of its different manner of entertainment, was comparatively unaffected by such local modifications.

by the disease which a little later brought his illustrious life to a close, and he was not able to be present at all the meetings. As he had no assigned part in the programme and as there was no stenographer to preserve extempore remarks, the record of his share does not appear in the published "Proceedings" except in casual allusion. Yet an offhand address that he made on the last morning before adjournment was of such power that one may well question whether it has been excelled by any of the great speakers in subsequent meetings. Its immediate effect was to arrest a course of action on which in his absence the Conference had decided with little dissent, to compel the rescinding of the vote, and to change the current of conviction in most of those present on a subject of such vital significance as United States Government aid to public schools. It was not only the eloquence of his voice and the force of his arguments that had such telling effect; it was his personality, identified with courageous, noble statesmanship in Congress and in Cleveland's Cabinet, and covering itself with new honors in his succession to General Lee in the presidency of the university at Lexington. This was one of his last great acts of public service, and most happily has its influence continued in the spirit of all this movement.

It was the good fortune of the Fourth Conference to have as its sponsor in coming to North Carolina Dr. Charles D. McIver. The train which brought the party with Mr. Ogden from the north paused for a few hours at Greensboro, and the strangers were given their first introduction to the State at the Woman's Industrial College, that impressive embodiment of McIver's own ardor and persevering exertions. No introduction could have been more ideal, either in its effect on the guests or for the happy inauguration of a new chapter in the work under consideration. Here on the threshold of the State, before their arrival at the place of meeting, was this foremost leader of educational activities, this great-hearted man of the people, with all his courageous struggles and splendid triumphs lifting him to eminence, holding out the warm hand of greeting and joining with absolute confidence, with full surrender of himself, in an enterprise that must have seemed at that time of only doubtful promise. It was the action of Doctor McIver and others of similar spirit that quickly took the enterprise out of the region of doubt and made it a recognized engine of progress. Hardly less significant at the Fifth Conference was the welcome of Chancellor Walter B. Hill, of the University of Georgia. With a singleness of purpose as lofty as that of McIver he had given up his lucrative practice as a successful lawyer in Macon to devote his life to the educational interests of his State, and was held in honor throughout Georgia. If he had shown any hesitation in his attitude, if he had manifested the slightest suspicion of the soundness and genuineness of the undertaking proposed, it would have dampened all

enthusiasm. Farthest from this, he threw himself as completely into its plans as he had done into those of the university, and his recognized strength became henceforth the strength of all those with whom he thus became closely allied.

The identification of southern universities and other educational institutions with the Conference soon became general. While the meetings were at Capon Springs, much interest had been shown, as we have seen, by the University of Virginia and by Washington and Lee. Randolph-Macon College, at Lynchburg, and the Miller school had also been represented, as well as a number of other important schools at a greater distance. At Winston-Salem one of the principal addresses was by the president of the University of Tennessee, and another by the president of the Agricultural and Mechanical College of North Carolina. Doctor McIver also made an address, and several superintendents of schools from different parts of the South either spoke or read interesting papers. At Athens, Tulane University of Louisiana, the Industrial Institute of Louisiana, the Agricultural and Mechanical College of Texas, the University of Mississippi, the Alabama Polytechnic Institute, and Wofford College, of Spartanburg, were all represented among the speakers by the president, the chancellor, or a leading professor. With these were Superintendents Abercrombie, of Montgomery; McMahan, of Columbia; Gibson, of Columbus; and Evans, of Augusta, and such leaders of popular opinion as Governors Northen and Aycock, Judge Emory Spear, the Hon. Hoke Smith, Clark Howell, and John H. Small. Still more noteworthy was the representation at the Richmond Conference in 1903. Of the 42 addresses printed in the "Proceedings," 31 were by men of the South; 21 were by the presidents or professors of leading institutions, men like Kirkland, of Nashville; Alderman, of New Orleans; McIver, of Greensboro; Fulton, of Mississippi; Hall, of Atlanta; Houston, of Texas; Hill, of Athens; Dabney, Claxton, and Rose, of Knoxville; Venable, of Chapel Hill; Mims, of Durham; Tucker, of Lexington; Barringer and Kent, of Charlottesville; Boatwright and Mitchell, of Richmond; 5 were by State superintendents of education, and others were by the governor of the State, the editor of the Raleigh News and Observer, and men of eminence in educational effort. Subsequent meetings afford like examples. A notable address at Birmingham was that of Bishop Galloway, and among the other speakers were President Henneman, of Sewanee; Prof. C. Alphonso Smith, of Chapel Hill; Hon. Sydney J. Bowie, of Alabama; and Bishop Sessums, of New Orleans. Of the speakers at Columbia particular mention may be made of Governor Heyward, Col. G. A. Gordon, of Savannah; Dr. George H. Denny, of Lexington, Va.; and Dr. Burris A. Jenkins, of Kentucky; while the Conference at Lexington had the distinction of addresses from Governors Folk and Beckham.

By the attendance of northern people with the southern, these Conferences have been saved from becoming sectional and have been given a broad national spirit. At the Capon Springs meetings there were a considerable number of members who had spent their early life and received their education in the North, but were now devoting themselves to the cause of education in the South. Among these were Messrs. H. B. Frissell and Alexander Purves, of Hampton; Thomas Lawrence, of Asheville; C. F. Meserve and A. B. Hunter, of Raleigh; W. P. Thirkield and Horace Bumstead, of Atlanta; C. H. Dunton, of Orangeburg; Frank G. Woodruff, of Tougaloo, Miss., and Pitt Dillingham, of Calhoun, Ala. Of great influence, too, in the councils of these meetings was Dr. A. D. Mayo, who by the travel and observation of twenty years had familiarized himself with conditions in all parts of the South as well as in the North, and had given patient study to the subject of common school education, with a view to its wisest applications to the varied requirements of the southern people. All of these engaged in the discussions at Capon Springs, and most of them presented carefully prepared papers, which may be found in the published reports. Deeply conscious of the serious misunderstandings between sincere friends of education in different parts of the country, they cherished the hope that these gatherings would lead to more harmony of opinion and a spirit of cooperation.

PARTICIPATION OF NORTHERN PEOPLE IN THE MEETINGS.

The time was ripe. Events on the broad field of national affairs were operating to bring about more cordial relations between the North and South. When Bishop Burton, the president of the First Conference, was about to close the session he asked the members to unite with him in prayer, and in his prayer made particular mention of "our soldiers before Santiago." It was the spontaneous lifting up of Christian hearts in a restored unity of spirit, a unity that was coming to expression throughout the land. At the Second Conference, General Henry, having lately arrived from Porto Rico where he had been the governor-general, gave a narrative of the beginning of American educational methods in the new colony, and Mrs. Henry spoke on Woman's Work in Porto Rico. On such themes there were no differences. In the fields of business, too, sectional lines and party distinctions had long since given place to regard for mutual benefits. It was plain that the hour had arrived for systematic cultivation of the cooperative sentiment in education.

In the preparation for the Fourth Conference at Winston Salem this was a dominant thought. To the generous enterprise and administrative wisdom of Mr. Robert C. Ogden, in this exigency, are largely due the results which have ensued. As the newly chosen president of the Conference, Mr. Ogden invited a large number of northern

friends who were interested in education to go with him as his guests, and he provided a special train for their accommodation. The object of the trip was much larger than to carry out a convention programme; it was to acquaint influential northern people with those of congenial spirit in the South; to give northern people a better knowledge of southern institutions, southern conditions, and the enlarging opportunities of every kind in these Southern States. The company not only attended the Conference, but visited Hampton Institute, Randolph-Macon College at Lynchburg, the Woman's Industrial College at Greensboro, Tuskegee Institute, the Calhoun School, and the State College at Auburn, Ala., and spent a day on the way in Atlanta. In all of these places, as well as at Winston Salem, the hospitalities of the southern people were unbounded, and the social interchanges were such as to cultivate not only mutual respect and confidence but enduring friendships. This trip so completely fulfilled the purpose in mind, and so much more than realized the anticipations entertained, that Mr. Ogden repeated it from year to year in connection with the next five Conferences. On these trips visits have been made to many other institutions, not only to those in the communities which entertained the Conference, but to the University of Virginia at Charlottesville, Washington and Lee at Lexington, the Polytechnic Institute at Blacksburg, Va., the Woman's College at Rockhill, S. C., the University of Tennessee at Knoxville, the schools in Chattanooga, the University of Alabama at Tuscaloosa, the State Normal School at Montgomery, and schools at Montevallo and Union Springs in Alabama. Some 30 or 40 of the leading educational institutions of the South have thus become familiar to many northern people, not by reading or report, but by personal observation under the happiest circumstances.

The people who composed these parties varied from year to year, but on every trip there were many whose influence was sure to be widely felt on northern sentiment. Among them were not a few men of affairs who had been identified with important civic movements: Messrs. George Foster Peabody, William H. Baldwin, R. Fulton Cutting, Everett P. Wheeler, Seth Low, Edward M. Shepard, William Jay Schieffelin, V. Everit Macy, John Crosby Brown, Robert Treat Paine, Hugh H. Hanna, and others. There were authors and editors of distinction: Messrs. Richard Watson Gilder, St. Clair McKelway, Lyman Abbott, Hamilton Wright Mabie, Felix Adler, Albert Shaw, Walter H. Page, Thomas Wentworth Higginson, John Graham Brooks, J. V. Sears, Talcott Williams, Samuel U. Crothers, Charles Hopkins Clark, and many others. Northern universities and colleges were represented by prominent members of their faculties: Dean Russell, of the Teachers College in New York; Dr. Francis G. Peabody, of Harvard; Prof. Henry W. Farnam, of Yale; Dr. William

MacDonald, of Brown; President William D. Hyde, of Bowdoin; Prof. L. H. Bailey, of Cornell; President Truman J. Backus, of the Packer Institute; Dr. James MacAlister, of the Drexell Institute; Drs. E. K. Mitchell and M. W. Jacobus, of the Theological Seminary at Hartford. Departments of education in the civil government were represented by Dr. William T. Harris, the United States Commissioner; Dr. A. S. Draper, of Albany; Superintendent W. W. Stetson, of Maine, and Superintendent William H. Maxwell, of New York City. The churches were represented by Bishops Doane, McVickar, and Lawrence, Doctors McConnell, Parkhurst, Frothingham, Cummings, Kinsolving, Cooper, and Merriman, and Rev. Joseph H. Twichell. It was not possible that men like these, in such positions as they held, could be brought into familiarity with the best institutions of the South and into personal acquaintance with the leaders of southern thought without diffusing abroad inestimable benefits to the people of both the North and the South. No adequate conception can be had of the virility of the movement unless these personal elements are taken into account—the wide-reaching moral influence of the uttered convictions of these men in whom people everywhere believed as sound in judgment, sincere in purpose, and wise in counsel. Voices like these, not only on the lips of the speakers but in the columns of the million-leaved press, going out into every part of the country, were listened to and made their abiding impression on the thought of the hour.

THE MEANS ADOPTED FOR THE SYSTEMATIC GATHERING AND DISSEMINATING OF INFORMATION.

In the earlier Conferences, just as in those more recent, the object of search was actualities. Over many things there hung a mist of doubt. In asking how good schools might be developed for the whole southern people, one was confronted with many perplexing questions. Conditions in this part of the country were so unlike those in the North as to shatter some sacred theories and to prove a great deal of scholastic wisdom to be foolishness: Only here and there a city in these broad stretches of territory, most of the people scattered and living in isolation, traditions unfavorable to public schools rather than favorable, habits of illiteracy widely prevalent and not even always regarded as a misfortune, and that most baffling tangle of all, two races to complicate every law, usage, and principle of action. In face of all this it was felt that the first requisite was to have the facts, simple ungarnished truth about things as they were. This had been the method of Doctor Mayo in his long and varied study of schools and school requirements throughout the South, and there were others who had followed the same course during their more limited expe-

rience. At the Second Conference, in 1899, the following was among the resolutions adopted:

> That the executive committee be authorized, in case it can procure the funds necessary to meet expenses, to employ an agent of this Conference, who will work under the direction of Doctor Curry, its president, whose chief duty it will be to study conditions in detail and to ascertain such facts with respect to southern education, both public and private, as will make more clear what methods and agencies are to be encouraged, and what to be avoided or reformed, and will secure better harmony and a more efficient concentration of effort in all educational work carried on in the South. Such agent will report to the executive committee from time to time, and the committee will make annual report to the Conference.

In due time a member of that Conference was designated for this position, one who was already familiar with the work suggested by the travel and observation of several years, so that the service was only a continuation of that in which he had long been engaged.[a] With this appointment the Conference entered upon a systematic course of intelligent practical effort, which has kept ever the same in spirit while constantly enlarging its scope.

As first in order of importance, statistical investigations were undertaken. As soon as the earliest bulletins of the Twelfth Census were published they were diligently examined for all information they might contain relating to the Southern States. Movements of population, the growth of cities and towns, the proportions of native and foreign born, the proportions of white people and negroes, the literacy and illiteracy of the different elements, and the advances shown from one decade to another, also the relative prosperity of those in cities and in sparsely settled regions, the agricultural conditions in different parts of the country, and the indications of progress or deterioration were brought under review. On many subjects of this kind the figures were critically studied, county by county, for all the States of the South; comparisons were drawn between States, between different sections, as the mountain country, the Piedmont regions, and the alluvial belts; and often contrasts in many particulars were observed with respect to prevailing conditions in the North and in the West. It was brought out that the white people of the South are of the early American type and slightly affected by the recent immigrations which have overspread the rest of the country; that they are a rural people for the most part, and for this reason out of the enriching currents of modern enterprise; that the growth of cities is constantly drawing away from the sparsely settled regions such people as would do the most for their higher concerns, and that these sources of national strength are receiving no adequate attention. These figures laid the foundation for a great deal that followed. Some were

[a] The agent referred to is Rev. G. S. Dickerman, the writer of the present paper.—ED.

presented in the agent's reports to the Third and Fourth Conferences; some were given publicity through magazine articles; much of the material was placed in the hands of the Bureau of Information established by the Southern Education Board in Knoxville and went into the statistical bulletins distributed from that office; and one paper appeared as Chapter VIII of the Report of the United States Commissioner of Education for 1902, from which it was reproduced in part for Mr. Murphy's book, The Present South.

Another service was that of searching for events of marked significance in the way of public school improvement anywhere in the South. A number of such incidents were found, which were so suggestive and seemed to contain such valuable lessons that they were especially mentioned in the agent's report of 1900. At Columbus, Ga., manual and industrial training had been introduced with marked success into the public schools for both the white children and the negroes. In Washington County, Ga., the county superintendent was bringing into all the schools under his care changes so great as to seem almost revolutionary, consolidating the little schools so as to have only 85 where there had been a hundred and thirteen, having public conveyance for children remote from the schools, designating 10 schools in different parts of the county to be developed into schools of a higher grade, and requiring in every school some kind of instruction for the hand, some lessons in industrial skill. In Buncombe County, N. C., another county superintendent was wrestling with the peculiar difficulties of a mountain region. He had discovered the misuse of large sums of school money for roads and bridges and had recovered the amount in the courts; he had then reflected on how he might develop a system of longer terms in the schools to the best advantage; and he had devised a scheme for having schools for the little children through the summer months and those for the older boys and girls during the winter, keeping the same teachers and affording them employment through most of the year. At Auburn, Ala., in connection with the State Polytechnic Institute and the United States experiment station, a system of correspondence was in practice for the instruction of farmers in every county, a tentative course in agricultural education, suggestive of the most wide-reaching improvements in the school work of country children.

Perhaps the agent's most important errand was the more personal one of becoming acquainted with those men of the South who were educational leaders, for the purpose of gaining their attendance at the Conference and their cooperation in its efforts. Through such interviews not a few received their first impressions of the value of these assemblies and were led to give the subject more than a passing thought. Of those who became interested, a number promptly identified themselves with the movement; some of these came rapidly to the

front as counselors, and it was not long before the direction of its most important affairs was largely intrusted to their charge.

ACTION REGARDING COLORED SCHOOLS AIDED BY NORTHERN CONTRIBUTIONS.

One subject that received much attention at the Capon Springs meetings was the employment of funds obtained in the North to maintain schools in the South, particularly schools for negroes. Among the resolutions adopted at the Second Conference was the following:

> That the Conference appreciates the urgency of the need for a general committee of direction, in harmony or in conjunction with the management of the Peabody and Slater funds, to guard against the haphazard, and in some cases harmful, use of the money contributed at the North for negro education.

At the next Conference in 1900, a committee was appointed to advise what action should be taken on this subject, and reported as follows:

> We recommend that this Conference constitute Dr. J. L. M. Curry, general agent of the Peabody and Slater funds, Rev. G. S. Dickerman, agent of the Capon Springs Conference, and Mr. R. Fulton Cutting, a committee to serve as a bureau of information on the subject. This committee is to stand ready to investigate all cases referred to it of schools claiming to educate the colored race. The attention of the public should be called to the existence of this committee, and all persons shall be asked to consult it before giving aid to unknown parties. The committee in each instance is to report the facts in the case with all information necessary for a clear view of the situation.
>
> It is also recommended that the committee we have named be asked to report at the next Capon Springs Conference what further steps are necessary to promote the object stated above.

On motion, the report was adopted, and steps were at once taken to carry its directions into effect. The duties enjoined were of so delicate a nature as to call for the greatest discrimination and prudence. It was the committee's aim to look upon all efforts in their more comprehensive aspects, and, so far as possible, to increase the effectiveness of all faithful workers. Much careful study had already been given to the schools maintained by northern gifts; the larger number of these were under the oversight of responsible organizations; but there were others which had been started by individuals who were accountable to no one, and whose work was under no proper supervision. These latter were often close to schools of high standing, whose usefulness they hindered by drawing pupils away from them, thus doing a work which was not only useless but positively mischievous, at the same time deriving their support from generous people at a distance who could not know the circumstances. The solicitors for these schools were often intelligent, attractive, and sincere, but sadly mistaken in their endeavors, in which cases they might be directed by kindly advice to some other field of effort where they

would be really useful. A few were unscrupulous impostors, for whom the only course was exposure.

A card catalogue was prepared of all the negro schools receiving pecuniary assistance from northern sources, with the more important facts concerning them. Then particular attention was given to doubtful schools, their nearness to reputable institutions, the want they were trying to meet and the chances of their being useful, their origin, record, and the competence of their teachers; the schools were visited and inquiries were made of responsible people in the neighborhood concerning their local standing. The information thus acquired was made available to those who might seek it. The good people whose contributions were continually asked quickly availed themselves of the offer, and unworthy applicants found it less easy to make their collections. As a result, some needless undertakings were discontinued, while schools of evident worth were encouraged to a vigorous growth; till it became generally understood that any school which hoped for maintenance from northern friends must be able to show that it was doing a work of substantial merit.[a]

This work was continued for two years or more, and a considerable body of reliable information was accumulated about many obscure negro schools in various parts of the South. On the establishment of the reference library of the General Education Board, at 54 William street, New York, these records were transferred to their care, and since then information of this kind has been given from that office.

THE IMPULSE TO ORGANIZE AND THE EVOLUTION OF THE SOUTHERN EDUCATION BOARD.

The Fourth Conference at Winston-Salem in 1901, with its attendance of southern leaders of thought from many States and its tone of high expectancy, was in itself the evidence that the hour had arrived for some action looking toward an efficient organization for educational improvement. This conviction pervaded the Conference and found expression at last in a resolution: "To organize by the appointment of an executive board of seven." The naming of this board was left to the president, Mr. Robert C. Ogden, and it was further voted that he should be an eighth member of the board. Mr. Ogden regarded the selection of these members as of such serious importance that he delayed the appointment for a number of months, and then, after the fullest consideration, made his announcement.

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[a] An extended report of the work of this committee was read by Doctor Curry at the Winston-Salem Conference. The closing paragraph was as follows: "In conclusion we wish to say that in our opinion the essential requisite for a wise and sound development of the educational work for negroes is a better understanding, throughout the country, North and South, of the actual conditions and facts involved. The time has passed for one-sided views and for contentment with half-truths, as also for evasions and misrepresentations. The time has come to look at things as they are and to face with unhesitating courage every aspect of this great problem of education for the South."

The original members of the board as constituted August 2, 1901, were Messrs. Robert C. Ogden, J. L. M. Curry, E. A. Alderman, C. D. McIver, C. W. Dabney, H. B. Frissell, Wallace Buttrick, and George Foster Peabody. The first action of the board was to increase its membership by the election of Messrs. William H. Baldwin, Albert Shaw, Walter H. Page, and H. H. Hanna. By subsequent action from time to time other members have been added: Messrs. Edgar Gardner Murphy, Walter B. Hill, F. R. Chambers, G. S. Dickerman, David F. Houston, S. C. Mitchell, Henry E. Fries, Sydney J. Bowie, and P. P. Claxton. Messrs. Curry, Baldwin, Hill and McIver have been removed by death. There have been 21 members in all, of whom 14 were natives of the South, and all have identified themselves in many ways with southern interests and progress.

In the following year the General Education Board was organized in New York, with the purpose of a wise cooperation with the Southern Board in its work. The members of the General Education Board have been Messrs. William H. Baldwin, jr., George Foster Peabody, Wallace Buttrick, J. L. M. Curry, Daniel C. Gilman, Morris K. Jesup, Robert C. Ogden, Frederick T. Gates, Walter H. Page, Albert Shaw, J. D. Rockefeller, jr., Starr J. Murphy, Hugh H. Hanna, E. Benjamin Andrews, Harry P. Judson, E. A. Alderman, and H. B. Frissell. The general board is here named as one outcome of the wide movement, though in its development it has no organic connection with the southern board and directs its operations to other parts of the country as well as to the South.

Immediately after the organization of the Southern Education Board steps were taken to carry out the designs for which it was created. Field work was planned by the appointment of Doctor Curry as supervising director, Doctors Alderman, McIver, and Frissell as district directors, and Doctor Dabney as chief of the bureau of investigation, information, and publication. The five above named were united as a campaign committee, with Doctor Curry as chairman. The agent of the Conference was continued as general field agent of the board, in which position he has fulfilled a diversified service without interruption to the present time. With a view to more effective cooperation in educational work for the negroes, President Booker T. Washington, of Tuskegee Institute, was also appointed to be a general field agent. Mr. Edgar Gardner Murphy was associated with the chairman as secretary in executive work. For direct activity among the people, in awakening interest and promoting every kind of school improvement, a number of men were selected who had already risen to eminence as educational leaders in their respective States and who were in a position to understand what particular improvements were most needed.

In Virginia the board was happy in the assistance of Hon. Henry St. G. Tucker and Dr. Robert Frazer. Prof. Tucker had been educated to the law and was a brilliant popular speaker. He had served four terms in the United States Congress, and then had been intimately associated with President Wilson in the faculty of Washington and Lee University. In company with President Wilson he had attended the Second and Third Conferences at Capon Springs, entering heartily into the spirit of those meetings; he had also attended the Fourth Conference and had been a member of the committee of ten who drafted the resolutions that brought the board into existence; so in a vital way he belonged to the movement and knew it from its origin, understanding thoroughly what it meant and the objects it was pursuing. Doctor Frazer was also a man of influence, especially among those who were interested in popular education. He had been for a time president of the Industrial College at Columbus, Miss., and more recently principal of the Virginia State Normal School at Farmville. In his work of training teachers he had become informed of the conditions prevailing among the public schools of the State and was therefore in a position to make the most valuable suggestions. Prof. Tucker, using the methods of a campaign speaker, gathered large mass meetings at the court-houses in the different counties and talked to the people about their duties to their children and the necessity of intelligence for any solid prosperity, while Doctor Frazer supplemented his efforts by careful inquiry into the particular things required to make better schools and more effective teaching. Such a combination could not help being fruitful.

SUBSIDIARY AGENCIES OF THE BOARD; METHODS OF THE DIRECTORS.

For the bureau of publication, which it was decided to establish at Knoxville, were secured the services of Messrs. P. P. Claxton and J. D. Eggleston, jr. Professor Claxton, a native of East Tennessee and a graduate of the State University, having extended his education by foreign travel and study abroad, had been associated with Doctor McIver in the development of the college at Greensboro, where he had also established and edited the North Carolina Journal of Education. His varied experience as a teacher and educational journalist qualified him in a remarkable manner for the peculiar duties of this new position. An admirable associate for Professor Claxton was Mr. Eggleston, who had been a successful teacher and superintendent of schools at Asheville and had afterwards been employed in the Johnson publishing house at Richmond. The success of this bureau in preparing and distributing valuable information thoughout the South, and the subsequent rise of the Summer School for Teachers at Knoxville under Mr. Claxton's supervision, besides other most important campaign work, have abundantly shown his

power, while the election of Mr. Eggleston to be the State superintendent of public instruction in Virginia proves how high a place he has held in the educational field.

In Alabama Mr. Joseph B. Graham, a prominent member of the State legislature, accepted the office of field agent and was carrying on his work with great ardor and success when his beneficent service was suddenly broken off by an accident which caused his death.

In North Carolina Doctor McIver had been conducting for more than fifteen years a ceaseless campaign in behalf of popular education; he understood the field in which he was engaged, he knew his forces and his lieutenants, and he had only to call them to his side for the more aggressive movements that were now to be made.

By the 1st of January, 1902, the arrangements for the new campaign were so far advanced as to warrant a beginning of activities. The measures proposed and the courses entered upon met with the cordial approval of the southern press and with the practical support and efficient aid of the people engaged in educational effort. The printed leaflets of the Knoxville bureau were distributed to the local newspapers in all the Southern States and, copied in their columns, went abroad to many thousand readers. To illustrate the methods of the directors in entering on their work, a passage may be taken from Doctor McIver's address at the Athens Conference in the following April:

As district director of the Southern Education Board my work has necessarily been confined largely to my own State. It was the understanding at the last session of the board that, if practicable, a vigorous campaign for the improvement of the public schools of North Carolina should be inaugurated. Knowing that it would be unwise and useless to undertake such a campaign except in hearty cooperation with the educational authorities of the State, I laid our plans and purposes before the governor, Hon. Charles B. Aycock, and the State superintendent of public instruction, Gen. Thomas F. Toon, both of whom gave their hearty indorsement to the movement and expressed their appreciation of the spirit in which the Southern Education Board desired to aid in our educational development. On account of the long-concontinued illness of General Toon, it was impossible to have a conference with him during the month of January; but on February 13 he and Governor Aycock united with me in calling to Raleigh a conference of about 40 teachers, representing all lines of educational work. Representatives of the State colleges and denominational colleges, county superintendents and city superintendents, representatives of high schools and seminaries of every class were present. The conference made a declaration against illiteracy and issued a striking address to the people of North Carolina. There was perfect harmony in the meeting and a unanimity of sentiment that the combined educational influences of the State should be brought to bear upon the improvement of rural schools. A campaign was inaugurated to secure the consolidation of weak school districts, the improvement of public schoolhouses, and the adoption of local taxation to supplement the State school tax. The governor, the State superintendent, and your district director were made the executive committee of this association and the managers of the campaign. The address was published by practically all the newspapers in the State, and copies were furnished to students of colleges and pastors of all churches. A special committee was appointed to furnish educa-

tional matter for the newspapers from time to time, and another committee to make a special request of every preacher in North Carolina to deliver at least one sermon a year on the subject of education. From the beginning this movement had the almost unanimous indorsement of the press of the State.

ATTITUDE OF THE FIFTH CONFERENCE.

Naturally the theme of the Fifth Conference at Athens was the organization of the two education boards and a forecast of the work on which they were now entering. It was a meeting of mutual congratulations, jubilant anticipations, and abounding good feeling. The Hon. Hoke Smith in his address used the following words:

This convention gathers here, with educators from all over the Union, and with big-hearted, patriotic philanthropists from Eastern States, to confer upon what to us is the most important of subjects—education. Education is important everywhere, but it is especially an important subject with us because so necessary and yet surrounded with so many difficulties. * * * We hold our hand out to you, Mr. Chairman, and thank you for coming among us, but we say to you that we would be unworthy your coming did we for one moment hesitate to tell you that the education of all the children of the South is our work, and by God's help we mean to bear it. And we mean to carry it on until every child within the borders of the South, white and black, shall have a thorough education. * * * Our forefathers, those earlier patriots, were earnest in their religious views; they believed in the old doctrine that we are our brothers' keepers. In our organic laws they stamped the doctrine of human rights. If we are to be true to the faith and teachings of our ancestors, if we are to obey the spirit of our organic law, we must train the children of both colors, leading them, through eight months of schooling yearly, to their minds' highest possible accomplishment.

Governor Aycock, of North Carolina, spoke in a similar vein:

Education means some self-sacrifice to achieve the higher and better things. I want to say to our distinguished friends while in conference here together that I count it far more gain to the cause of education that we meet together as brethren and discuss these matters than the gift of all the millions which they could pour into this work. Eighty-two per cent of the population of my State dwell in the country. I have quit talking to the towns of our State; I go straight to the country, and I desire to impress it upon you that your workers should go to the country and stimulate the people to vote for local taxes for the public schools and help them in every way until the rural districts shall regain what they have lost and become what they used to be—the strongest part of this Southland of ours. * * * These people have in them the same blood that flows in your veins and the same Revolutionary ancestry; the same blood that was left by the bleeding feet of their ancestors at Valley Forge; the blood of the men who followed Stonewall Jackson and Robert E. Lee; they have in them the blood of the gallant men who followed with Pickett and Pettigrew up the heights of Gettysburg to meet men as brave as themselves. All they need is to see the truth, and when they have seen it they will take up the fight against illiteracy and carry it on.

Judge Emory Speer, of Georgia, after an eloquent allusion to the people of the Appalachian Mountains, as represented by Morgan, Ferguson, Lincoln, Jackson, and Houston, added the following words:

Such are the types of that intrepid and vigorous stock which multiply amid the rugged grandeur of these southern mountains. And still the husbandman of the mind does not bind up the sheaves there nor yet the gleaner fill his bosom. Oh, what a harvest to be planted and ripened! On San Jacinto the captured Santa Ana inquired of

Houston how it was that with a force so small the American could win so complete a victory. Drawing from his pocket an ear of corn, the President of the Republic of Texas exclaimed: "When patriots fight on such rations as this, they are unconquerable." And afterwards the veterans of Houston begged of him the grains of that famous ear, and to this good hour, from the rich bottoms and broad prairies of Texas millions of bushels of golden grain are gathered from the seed then sown. Sir, may the labors of this unselfish and ennobling body, under the providence of God, fructify and bear fruit like the corn of San Jacinto.

THE RESPONSE THROUGHOUT THE SOUTH.

The following year was one of increased activity. Especially noteworthy was a series of meetings of school superintendents. These meetings, arranged by Doctor Buttrick, at the expense of the General Education Board, were held in eight different States and proved exceedingly profitable. They aimed to bring together the county superintendents of a particular State at some convenient center to promote mutual acquaintance and a candid discussion of the more vital educational questions. In a number of cases they resulted in a permanent organization with annual meetings. Such conventions could not fail to be of great value to the superintendents. Coming into association with one another from all parts of a great State, conferring on questions of common interest, and aligning themselves with their best educational leaders, their office assumed a new dignity and their duties a higher significance. And if good came to the superintendent it could not stop with him; from him it would be sure to go out into the neighborhood where he lived and over the county of his jurisdiction.

For the campaign work in all its phases able advocates promptly came forward in the several States and enlisted in the work. Presidents and professors in the universities and colleges, lawyers, business men, and holders of office—the friends of progress and the molders of popular opinion were quick to see their opportunity and to improve it. The most practical school questions came up for discussion: Local questions and those more general; better buildings and a higher grade of teaching for the particular community; improved legislation, wiser taxation, larger appropriations, and more efficient administration of the entire educational system of the State. People gathered in mass meetings at their court-houses, in churches, and in public halls, in the city and in the country alike, to hear men talk on education, to listen intently to discussions about the improvement of their children's schooling. Larger numbers came out to these gatherings than to any others. Political orators and spellbinders in a political campaign failed to secure the attendance or to arouse the enthusiasm of these college presidents, superintendents, and school-teachers, who came with their message of a brighter hope and a higher service for the children.

The sweep and power of this movement appeared in the Sixth Conference, in 1903, at Richmond. Many of the speakers came there directly from the campaign work in which they had been engaged in different parts of the South, from Virginia, from the Carolinas, from Georgia, Tennessee, Alabama, Mississippi, and Louisiana, and their addresses in some cases were partly the same which they had used with the people of their respective States. This event was like the focalization of the best thought and feeling now coming into vigorous expression everywhere. A comparison of the Richmond meeting with the last one at Capon Springs three years before shows how fast things had been moving. At Capon Springs there was an attendance of 44, and two-thirds of these were either northern people or people of northern antecedents; of the 14 who were wholly of the South, one was from Kentucky, one from Georgia, and all the others from Virginia. There was not a superintendent of schools present, not one—State superintendent or county superintendent. Of the great schools founded and maintained by southern people, several were represented by delegates of great influence, but all of these were from the one State of Virginia. Nor was the press of the South any better represented; only the editor of one paper was there. The meeting was significant; it dealt with a great subject, and it took into view great movements that were surely on their way, but it was unknown through the South. Three years later, at Richmond, only about 150 miles from the former place of gathering, how different it was! The whole South knew of that meeting, and the South was there with representatives of its noblest educational institutions.

At this meeting also there was a more representative attendance of people from the North than had been seen at any similar gathering on southern soil. One reason for this was the place of holding the Conference, Richmond, the capital of the Confederacy. With the spread of a national spirit, rising superior to sectional considerations in all parts of the country, this historic city had an attractiveness peculiarly its own for the purpose designed. Of all centers of influence and of inspiring associations for the South, this was foremost, this the metropolis from which most effectively and fittingly might radiate the forces of a higher educational life.

So it came about that this Sixth Conference was a gathering of the foremost educational leaders of both the North and South for better acquaintance, for the removal of misunderstandings that might still remain, and for courageous purpose in view of the vast service to be undertaken in behalf of the less favored children of the Republic. The peculiar circumstances could not occur again, and the object once fulfilled, the occasion for it no longer existed. Thus in this meeting there was a culmination of the design of the Conferences in one phase, that of cooperation between the people of the North and of the South. Subsequent Conferences have continued to cultivate this spirit of united endeavor, but never again on so large and impressive a scale.

MEMORIAL SERVICE FOR DOCTOR CURRY.

Another circumstance was the arrangement for having the final session of the Conference at Charlottesville, and in connection with it a memorial service for Doctor Curry. The name of Doctor Curry was one to attract men of eminence from all parts of the country. No other man in recent years had stood for so much in the educational development of the South, and no one else had better exemplified the new national spirit that was beginning to prevail.

The character of this Conference in all its notable utterances during the three days of its sessions is well illustrated in the closing words of Doctor Alderman's memorial address. Speaking of Doctor Curry he says:

> The chief work of this noble life was to develop an irresistible public opinion in a democracy for the accomplishment of permanent ends. In short, through such work as his in one generation of grim purpose and intellectual audacity, the South has lost its economic distinctness and has become a part of American life and American destiny, and the North has learned to love, I trust, its brothers whom it did not know and therefore could not understand. Men may forget the oratory, the diplomacy, the intellectual vigor, the gracious, compelling charm of Curry the man, but they will not forget the zeal, the self-surrender of Curry the social reformer and civic patriot.
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> * * * His work has been accomplished and has been handed on to the living, and he has gone. His fame is secure, for it is the persistent fame of the teacher and reformer.
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> Marcus Aurelius in his tent on the Danube tells how he learned discipline from Rusticus, and kindness from Sextus, and patience from Alexander, mentioning one by one his old teachers, and their names glow there forever beside their pupil's—the pure pagan—shining like stars in that heathen light. In such ways does the teacher live on through generations, teaching in death as in life. Is it not the task of the living to take this public opinion, now ductile and shapable, and fashion it into scientific, active forces, and realize it in ever greater and more enduring institutions and agencies for the betterment of man? Is it not our task, gaining strength from the example of this dead leader of ours, to press forward with patience and quiet resolve, not to be deterred, not to be made afraid, not to despair, not to listen to any voices save those voices within us which tell us that such work can not die? Surely this work we are in is the nation's work, and this nation is a great spiritual and moral adventure worth living for and working for, as well as dying for.
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> Earnest, simple men, like him of whom we have spoken, have hallowed its past by upright living and patriotic purpose. Strong, stout souls hear the call to battle for the integrity of its present life, and hints and prophecies of its wide and liberal future sing in the hearts of the long, bright line of invincible youth to whose freedom we stand pledged, even as there stood pledged to us the high-statured men of the olden time.

To such a key as this were the voices attuned that went out from that Conference of 1903.

THE SEVENTH CONFERENCE (BIRMINGHAM, 1904).

An invitation was received at Richmond to hold the next Conference at Montgomery, Ala., and so general was the welcome accorded to this proposal that other invitations which had been

prepared were withheld from announcement. Before the final decision was made, however, it became evident that Birmingham could afford ampler accommodations, and so the choice went to that city.

While the Conference of 1904 was less representative of the whole country than that in Richmond, it was more representative of the South, and especially of the lower South. In a number of respects also it showed a distinct advance on the meeting at Richmond. This was particularly true of the reports from the field. Accounts of educational conditions in the South had been a leading feature of all these Conferences, and from year to year these had grown in their scope and significance. More and more had the Conference looked to the men actually in the field for information and direction. Since the organization of the Southern Education Board the members of the campaign committee had regularly made their reports on the work of the previous year. Others who were in position to have the fullest knowledge of the facts under consideration—college presidents, journalists, governors, superintendents of city schools, and State superintendents of education—had read papers and made addresses of the greatest value for the wide and thorough information they gave. But at Birmingham, for the first time, the State superintendents appeared officially and made their reports as representing the departments of education in their respective Commonwealths.

REPRESENTATION OF THE STATE DEPARTMENTS OF EDUCATION.

Reports of this kind were presented from Mississippi, Tennessee, South Carolina, Alabama, and Louisiana. Other States would undoubtedly have joined them but for the fact that they were so ably represented in other ways by such men as Chancellor Hill, of Georgia, Doctor McIver, of North Carolina, and Doctors Frissell and Mitchell, of Virginia. These reports of the superintendents not only acquainted the Conference with the educational conditions familiarly understood by them in their work, but it gave to the Conference their point of view. More than that even, it brought the Conference into sympathetic touch with the organized school systems of the several States and led to a practical cooperation which otherwise would have been impossible. Such a connection once established, it was but natural that it should become more vital and controlling with each passing year.

When the Conference met in the following year at Columbia the State superintendents were there as an organized association with their duly elected officers, and on the first morning the president of the Conference announced their part in the programme as follows:

> It is understood that the official heads of the educational system in the several Southern States will assume control this morning. With one or two exceptions

they are all here. They are the power behind the throne, the unseen dynamic force that originates and carries forward the practical work with which this Conference has to do. It is therefore fitting that these gentlemen should have a share exclusively their own in the proceedings. So this morning's session will be in charge of the superintendents of education in the Southern States. The superintendents have selected our friend, Mr. S. A. Mynders, superintendent of instruction for the State of Tennessee, to preside. It is therefore my pleasure and privilege to present Mr. Mynders.

Mr. Mynders responded to this introduction in a few words which well express the purpose of the meeting:

On behalf of the Association of State School Superintendents of the Southern States we thank you for the courtesy extended to us here. We realize that this Conference has met for special purposes and we desire to express our hearty sympathy with its work. That has been already done by resolution of our board, as well as in our public statements. We are thankful to have this opportunity to participate in the exercises and are glad that the president has seen fit to assign us this time. The purpose of this meeting is not to have any lengthy prepared papers, but rather brief reports of special features of educational work in the South, distinct features of the labors of the past few years. These little talks by State superintendents are intended to cover the field with reference to work now in progress. It happens that we have made progress along different lines, and our secretary in assigning the subjects has had in view the particular work of the past two years.

The "control" of one session of the Conference, thus gracefully tendered and accepted, was anticipatory of a general directive function which belonged to the superintendent's office and which this association might be expected to assume.

Another circumstance greatly to the credit of the Birmingham Conference is that it did not shrink from boldly discussing the most vital and serious educational question that confronts the South:

THE DUTY OF THE STATE TO THE NEGRO.

This question occupied a large place in all the earlier conferences, and in the more recent ones it had received much attention. The address of Chancellor Hill at Richmond had been especially notable for its breadth of view, its purity of sentiment, and its fine judicial temper. But the atmosphere of the South in 1904 was different from what it had been in 1903. During the intervening year a prairie fire of racial excitement, kindled by a trifling incident and fanned by political clamor, had run over the South and made the feeling of the stronger people toward the weaker less kindly. It was an opportune time for defining the attitude of the Conference. Three different speakers made the interests of the negro people the theme of their addresses—Bishop Charles B. Galloway, of Mississippi; Dr. S. C. Mitchell, of Richmond College, Virginia, and Col. Thomas W. Higginson, of Cambridge, Mass. Bishop Galloway's address was the principal one of the opening evening, and Doctor Mitchell and Colonel Higginson were among the speakers of the closing evening. On both occasions the hall was crowded with an

audience of attentive listeners, and in no case was there any public demonstration of disagreement with the sentiments expressed. In all of the speeches from the platform there was not a word of variant tenor. The spirit that prevailed is shown by a paragraph from Colonel Higginson's address:

May I not be pardoned if I say to-night what no one else has had occasion to say here, namely, a word to those of that colored race whom I see at a far distance in the upper gallery? I wish to say to those men, as one who has reason to know and trust them, that of all the classes in this community who have reason to watch with interest the progress of these meetings and to bless God for the result, they are the men who can least afford to be indifferent. They, at least, can not afford to be otherwise than patient when the very men who have worked hardest for their instruction, the very men who have put their hands in their pockets most deeply for their benefit, the very men who have, as I understand, doubled the amount raised for schools in Alabama during the last few years, and largely for their good—when those men act and consult upon their affairs those men can be trusted. I would say to you that during all these discussions, in all this urgent demand for a wider and costlier education, there never has been a word of distinction on this platform in regard to race or color, as such—not a word. It has been a work for "the people." It has been "the young people of Alabama," the young people of this community, the student population as a whole, of whom they have talked. They have never made a distinction in regard to the appropriations to be sought or demanded or in regard to their purpose to put through the claim of education for all the youths of the State here represented.

The magnificent address which we heard last night from the Bishop of Mississippi took that comprehensive position firmly; and though I might object to some of his details, he met the main question, namely, education, so perfectly that it made his speech, it seems to me, not merely a speech before an evening audience, but before a State; indeed, not merely before a nation, but before posterity. Unless I make a mistake in my foresight, that speech of his will be put down in history as a distinct step in the progress of education in America. Give the whole people education, and the other matters will settle themselves for the best under the Providence of God sooner or later.

With these words, spoken by the colonel of the first black regiment enrolled in the Union Army of 1862, may be placed the following from the address of Doctor Mitchell:

By evolution we can prevent revolution. Danger lurks in indifference, in ultraconservatism, in reaction. What reserves of power can we summon against reaction? I answer, the people. Born in the blackest of the black belt, living my entire life in the bosom of the South, loving my people with a devotion second to that of no southerner, loyal to all that is good and beautiful in the traditions of the South, in whose cause my father battled under General Forrest, I can say with unfaltering confidence that the better judgment of the South revolts from these harsh and heartless proposals of reaction. The southern people are friendly to the negro; they know his strength as well as his weakness; they wish to do well by him in spite of difficulties; they are nerved in this high resolve by a sense of responsibility for his presence here, by a consciousness of superiority which is touched by the appeal of the weaker party, by a knowledge that a wrong done reacts upon the doer, by a chivalry that befriends the friendless, and finally by the stirrings of a divine instinct which trusts implicitly to the triumph of life and love.

What Colonel Higginson said of the address of Bishop Galloway, on The South and the Negro, was confirmed by the reception it received throughout the country. Among all the able addresses which have been given at the different Conferences no other has been so widely distributed through the press and in pamphlet form, and probably no other has exerted so commanding an influence. It was the voice of a southern man speaking in a southern city to an audience representing the thoughtful people of the whole country; it was a voice that rung with the authority conferred by the great southern church of which he stood as one of its most honored ministers; and it was weighty with the personal convictions of a man who "appeared not as the partisan of an idea, but as an ambassador of the truth and a lover of his country." It was greeted, therefore, by the reading public with much more than usual interest as expressing the mind and conscience of the real South.

WAYMARKS OF PROGRESS.

At each of the Conferences there has come out some definite expression of a hitherto unrecognized phase of the educational development going on with such rapidity.

High schools.—So at Columbia the paper of Superintendent J. H. Phillips on The High School in the Public School System brought into view the growing necessity for more earnest attention to secondary schools. There had been no paper on this important subject at any previous Conference. It had been touched by Doctor Fulton, of Mississippi, at Richmond, and by Doctor Henneman, of Tennessee, at Birmingham, but only in an incidental way to illustrate other lines of thought. Meanwhile the General Education Board, seeing this manifest want, had entered the field with a proposal for the establishment of professors of secondary education in a number of State institutions, and with the offer to aid in their maintenance. These professors were now in their several positions and the comprehensive work was going on. Mr. Phillips's paper told how vital were the functions of secondary schools in a healthy public school system. During the three years which have followed the interest has grown until this theme has become one of the foremost in all educational gatherings.

Compulsory education.—At the same Conference another vital theme was presented for the first time by Prof. W. H. Hand, in Some Arguments for Compulsory Education. To some who heard the paper it seemed almost like a freak of audacity, so strange was it to many of the cherished traditions of the South. But the arguments fastened the attention of the audience; they even elicited the indorsement of the governor of the State; they were taken up again at

Lexington, and now they are being discussed in popular assemblies from Virginia to Louisiana.

The meeting at Lexington, to a greater extent than any previous, was occupied with an exposition of things done by workers in the field. Since the earlier Conferences there had been a change from the speculative mood to one of engrossment with actualities, from study of theories to handling of facts. Those who came to Lexington were there for a practical purpose. This note was struck by the president of the Conference in his opening address, and again by Governor Folk, of Missouri, who followed him. The same note was dominant on the last evening in Doctor Alderman's address on The Achievements of a Generation.

Agricultural education.—Perhaps no better illustration of this practical temper can be named than was given by the "meeting in behalf of farm improvement." Agricultural education had been a favorite topic in previous Conferences, particularly at Richmond and at Columbia. But on this occasion the speakers had come directly from among the farmers whom they were guiding to a more efficient and productive agriculture. Dr. James W. Robertson, of Canada, told a story of how the people of Ontario, Quebec, and Prince Edward Island had been taught to increase their products of corn and cattle, butter and cheese, till their poverty had been turned into prosperity, and with this the schools for their children had been developed into institutions for industrial training as well as for ordinary education. And not a whit less impressive was the tale of Dr. Seaman A. Knapp concerning his ministry to the discouraged farmers of Texas, whom he had found a few years before in despair over the ravages of the boll weevil in their cotton fields, and had taught, by means of his "demonstration farms," to produce such harvests of rice and corn, and even of cotton, as to change their despair into exultation and open a door of hope to all the farmers of the South.

Local activities.—The superintendents' meeting at Lexington was phenomenal in a similar way, particularly in reports from the several States of new undertakings ventured upon and resulting in unexpected fruitfulness. The speakers told of meetings in hundreds of small rural communities, for the benefit of the local schools, and of the enthusiasm of the people culminating in organizations for school improvement; of assistance given by the press in publishing accounts of such meetings and stimulating interest in educational effort; of the advocacy of the cause by people of influence—ministers, lawyers, business men, and publicists; of the ready response of legislatures to petitions for better laws and generous appropriations; of the adoption of local taxation, with a growing disposition to rely less on the State and more on the county or district for maintenance of public schools. These reports gave details also of things accomplished;

how groups of small, ineffective schools had been consolidated into those well equipped and graded, with arrangements added for the conveyance of children living at a distance; how cheerless old log schoolhouses had been transformed or replaced, so as to give an attractive center for the educational life of the community; how school libraries were being established and interest in good reading promoted; how terms were being lengthened and salaries increased; how attention was turning to the better training of teachers and the demand rising for more competent county superintendents. Figures were presented in imposing array to show the wide extent of these activities and the seriousness of the popular determination with reference to these educational concerns.

AUXILIARY ORGANIZATIONS OF WOMEN.

Among the more recent developments especially mentioned at this meeting, one of the most significant was the rise of the "associations for the improvement of schools." It was reported that Virginia and North Carolina were rapidly covering their counties with these organizations, and that endeavors toward the same object were making progress in a number of other States. The great feature of these associations was their enlistment of the cultivated women of the South in educational enterprise. Of course these women had always been personally interested in the schools which their children attended and had exerted a quiet influence for their improvement. But now that influence had become systematic and aggressive. For a number of years women's organizations, patriotic, social, cultural, and philanthropic, had been multiplying in most of the larger communities of the South, and now, with the general awakening to educational interests, it was only natural for this organizing spirit to take the same direction. At the Conference in Birmingham, two years before, there had been an allusion to such a development in Louisiana. The report of Superintendent Aswell contained these words:

> One of the newest and mightiest forces in our educational work is the Federation of Women's Clubs. The last meeting in November was a notable one. Several scholarships were created for girls in the higher institutions of the State, and the Federation pledges itself unreservedly to the cause of public education, and I believe that the voice of the women of Louisiana is soon to be heard in no uncertain terms for better schools and schoolhouses for the children.

This force had been coming into expression, not only in Louisiana, but in other parts of the South, during these two years, and here at Lexington there was recognition of its significance. It was seen that the reports of the State superintendents must be defective without additional reports from the leading spirits in this auxiliary work. On this account a number of women who had been especially helpful

in establishing these associations for school improvement were asked to give an account of their successes. There were also separate meetings of the women engaged in educational work. One such meeting, at which interesting addresses were made by representative women from several different States, was held with the Women's Club of Central Kentucky; and there was a meeting of the Southern Association of College Women, at which action was taken to provide a scholarship that would enable some southern girl to pursue a college course. Still more impressive was the short, thrilling story told one evening to a great audience, by a Georgia school teacher, of the manner in which she had built up a thriving industrial school for poor mountain boys on a tract of land which had belonged to her father's farm.

The Conference at Lexington exerted a wide influence in Kentucky. Heads of institutions, superintendents, and teachers, with others from all walks of life, returning from the stirring experiences of the occasion, told their story and spread the new interest. The effect was especially marked among the women of Kentucky. The account of women's organizations and work in other States aroused the women's clubs to fresh educational effort and led to systematic endeavors which have since been fruitful and of great advantage to the schools. Of much importance was the extent of this influence in the adjacent northern States, Ohio, Indiana, Illinois, and Missouri, which had not been reached by the previous Conferences. On the other hand, its immediate effect on the more southern States was perhaps less marked than when the meetings were in their own borders. There were hardly more than a hundred present from all of these States; and while these were persons of wide influence, the power thus conveyed was not quite the same as that which came from direct participation in the assemblages.

The question was raised at Lexington whether it might not be profitable to hold the next Conference in a northern city, so as to acquaint the northern people more fully with a movement of such national interest. Accordingly an exceedingly cordial invitation was presented from Hartford, Conn., to hold the Tenth Conference in that city. The superintendent of the public schools of New York City likewise offered, in behalf of the schools he represented, the hospitalities of the metropolis. Invitations of similar tenor were received from the two southern cities, Nashville and Memphis. At the time the only action taken on any of these invitations was to refer them, according to the usual custom, to the executive committee of the Conference.

After the adjournment of the Conference at Lexington, it was the opinion of the executive committee that the next meeting should be at Nashville, and during the autumn preparations were begun with

this purpose. About this time the death of Doctor McIver, the directing spirit of the campaign, gave rise to many serious questions. It was felt by some that the exigencies called for a gathering of the educational leaders for council, instead of a popular assembly in which the more familiar consultation desired would be impossible. On this account a meeting of the executive committee was held in February, at Atlanta, and it was then decided to hold the Tenth Conference at the Carolina Hotel, at Pinehurst, N. C.

THE PINEHURST CONFERENCE A CONVENTION OF EDUCATIONAL LEADERS.

In many respects the meeting at Pinehurst was in strong contrast with others of the series. It was mostly a gathering of southern people. Of the 360 members enrolled all but about 40 were from the southern States. It was an assembly of those prominently identified with educational interests. Very few were there as mere spectators, and few whose interest in the occasion was superficial and general. Presidents of universities and colleges, principals of normal and technical schools, editors and press agents of newspapers and educational magazines, ministers, lawyers, and business men who were trustees of institutions and members of school boards, women who were officers of the school improvement associations and of the federations of women's clubs, and, especially active in all the proceedings, superintendents of the public schools, who represented the great systematized educational efforts of the several States—these gave the convention its character. The departments of education in ten States were officially reported by their superintendents of instruction; the State universities and normal schools were heard through their presidents or leading professors; the women's organizations in seven States appeared by their representatives. Such a gathering under the one roof of an ample and commodious hotel gave the most perfect facilities for the social interchanges and comparisons of views that were desired. Though coming thither from widely separated homes, and necessarily strangers often to one another, their common aims and purpose quickly made them friends and opened the way to freest discussion.

The convention had a stated programme and meetings from day to day in the hall of the hotel, but these played a comparatively secondary part. Informal conversations displaced the more artificial arrangements, and special meetings of a limited number for the discussion of some particular object came about spontaneously. So there were meetings of the delegates by the States from which they came, meetings of the women for conference about their "associations" and their "federations" and the relations of the work of one to that of the other; meetings of business men to talk over their duties

in the case, and meetings of others by twos and threes, and in larger groups, to get at the heart of whatever subject might arise.

One effect of this Conference was to bring many things into sharper definition. When the people separated on the third day their understanding of the educational situation was much clearer and more satisfactory than on the first day that they met. Misconceptions had been removed, the reason for things had been made plain, and the meaning of what was going on took a new hold upon the mind. The facts brought into view were full of encouragement to renewed endeavor, and the experience was fruitful in inspirations to meet all hindrances with a spirit of hopefulness.

THE SERVICES OF THE SOUTHERN EDUCATION BOARD.

In the foregoing narrative little has been said of the more strictly business features of the movement. It is sometimes better to look first at results, and to turn afterwards to the courses of planning and preparation which have brought them about.

The Southern Education Board was formed for a distinct purpose. There was a want, and the board was designed to meet it. At the Capon Springs Conferences one dominant thought was the necessity of cooperation; yet it was not shown how this could be effected. During the three years in which the meetings were held there in the mountains but little progress was made in bringing within speaking distance the people who needed to join hands. At Winston-Salem a good number of such people met and conferred on the subjects in which they were interested. Out of this came the spontaneous call for an organization which should enable them and others of a like mind to work together.

It was a large purpose, larger than anyone thought at the time. It was a proposal to unite the educational forces, working more or less separately and often in isolation, in a dozen great States. Of some little consequence, too, were the northern people who were endeavoring to do educational work in the South. There were some dozen or more well-known northern organizations engaged in maintaining schools in the South—some for white pupils and some for negroes—and for many years they had been collecting and expending amounts aggregating annually some two millions of dollars or more. Yet these northern organizations were each carrying on their operations with almost no regard to what the others were doing in the same fields. To think of bringing them into some sort of mutual helpfulness was no insignificant undertaking. Then in the South there were many large private schools and institutions supported by religious denominations, which had no more to do with one another than the northern schools. After these were the State universities and normal colleges, and finally the public schools of the several States, listed

under a general system, but really going each its own way very much at random. Each State had its own process of carrying on its schools, its own laws and usages, often quite unlike those of an adjacent State; thus, for example, one State, like North Carolina, looked to the State treasury for all its school funds, while another, like Tennessee, obtained much of its revenues by local taxation. In such dissimilar ways were the schools managed, and by so many desultory, disconnected efforts were the people in different parts of the country trying to reach the same end.

With all this variety of expression, the educational spirit was vigorous and growing in all parts of the South. This spirit, too, was instinctively national. An evidence of this was the southern representation at the meetings of the National Educational Association and other societies for the promotion of learning; another evidence was the resort of southern teachers in large numbers to the Chautauqua assemblies and to the summer schools at northern universities, and still another the increasing enrollment of southern scholars in post-graduate courses at institutions of national fame. There was danger even that these young leaders in the intellectual life should become so imbued with national feeling and a sentiment of world-wide affiliation as to lose their local interest, and fail to see the vastness of their opportunity in the several States to which they belonged. A union, conceived in a national spirit, for educational advance in the South could not but enlist their support and bring them an inspiring motive.

The exigency was one for an administrative genius. The Conference at Winston-Salem was fortunate in having for its presiding officer a man whose executive ability had been proved in a remarkable business career and his spiritual traits in a life of noblest fellowships and of lavish beneficences. On him was laid the duty of initiating the new organization. With the fulfillment of this duty there came at once the larger service of leading those who thus became associated with him, in undertakings pursuant to the design of the organization. The high purpose and unremitting labor which he has brought to this service during these years is best known to those who have had most to do in carrying out the many plans of which he has been the master builder.

The members of the Southern Education Board have been of three kinds: Southern men actively engaged in educational work and holding positions of commanding influence in the South; men whose early life was in the South and who are still deeply interested in all that concerns her welfare, though now identified with the North by residence and vocation; northern men who have made a special study of southern questions and become familiar with their larger meaning. To the members living in the South has been assigned the oversight of active efforts in the southern field. These at first bore the title

of field directors, but more recently have been called the campaign committee, while the chairman of this committee has had general supervision.

In all operations it has been a ruling principle to depend upon southern men and to defer to their judgment in the conduct of affairs. It has been taken for granted that the men on the ground could understand more clearly what had better be done, in most cases, than those living at a distance. At the same time the value of perspective has not been lost out of view, and great pains has been taken to acquire information of the broadest scope, so that the light of far experience might be made to brighten any spot, and things insignificant be dignified by their relation to other things of manifest importance. Yet always has it been recognized that the person doing the work was the one from whom to expect the harvest, the teacher among her children, the president of a college with the members of his faculty, superintendents animating the people of a county with higher ideas of the education their sons and daughters ought to enjoy, or administering the school system of a State so as to increase its effectiveness—these have been looked upon as the real educational builders, the foremost pioneers of the coming civilization. The Board has estimated that it could do no more far-reaching work than to enable such men and women to accomplish that on which they have set their hearts.

Thus the board has made more of personality than of machinery. The means it has employed have been very simple and direct in their application. Some money has been required, but no very large amounts, and these have been forthcoming as they have been necessary. The total expenditures for the whole period of its work have hardly been more than the annual budget of many of our larger educational institutions, yet the results accomplished have been far from insignificant.

A REVIEW OF FIVE YEARS.

In the autumn of 1907 a pamphlet was published giving a compendium of reports made to the board concerning the evidences of educational progress during the previous five years. This report was also printed as an appendix to the proceedings of the Tenth Conference. The following statements are taken from this review:

Financial progress.—Between 1901, when the board was organized, and 1906, five years afterwards, the six States—Virginia, North Carolina, South Carolina, Georgia, Tennessee, and Louisiana—as reported by their State superintendents, made an advance in their aggregate expenditures for public schools from $9,258,644 to $15,677,570, an increase of $6,418,926, or 69 per cent, and the amount raised for school purposes by local taxation and subscriptions advanced from

$3,942,107 to $7,016,864, an increase of $3,074,757, or 78 per cent. During the four years from 1901 to 1905, the estimated value of all public school property in the same States advanced from $14,809,161 to $22,321,829, an increase of $7,512,668, or 51 per cent, and the expenditures for public school equipments—grounds, buildings, furniture, libraries, and apparatus—advanced from $591,488 to $1,560,146, an increase of $968,658, or 164 per cent. In other words, for every $2 spent on public schools in 1900–1901 over $3 was spent in 1905–6. Six States have been named in this connection; if figures were available they would be found quite similar for Alabama and Mississippi, which have been included in the operations of the Southern Education Board and have shared in the progress. This is an expression in official figures of the general educational progress of these five years, as seen in the lengthening of school terms, the rise in salaries of teachers and school superintendents, and the more generous outlays for making the schoolhouses and grounds attractive, commodious, and effective as training places for the young.

Schoolhouses.—Of particular interest may be mentioned the outlays for schoolhouses. Hitherto there had been great negligence in the South at this point. In the United States Commissioner's report for 1900–1901, the table of figures showing the number and value of schoolhouses in the several States represents the average value of each house for the North Atlantic, North Central, and Western divisions to have been $3,239, while the average for these eight Southern States was $363. The houses in the rural districts of the South were especially cheerless, many of them made of logs, with furnishings to correspond. Speaking of these rural schoolhouses, Mr. Charles L. Coon, of North Carolina, estimated their average value in the eight States under consideration at $227. Here, then, was a place for improvements to begin. How general has been this beginning appears in the fact that in seven of these States over 2,000 new schoolhouses were built in a single year, and in the eighth—Tennessee—school property increased from $4,179,123 to $5,879,213, that is, $1,700,090, or 41 per cent. This was the report for 1906.

Consolidation of schools.—In connection with the work of building new schoolhouses there has been a widespread movement for the consolidation of small rural schools into larger graded schools with better equipment and a number of teachers. One of the earliest efforts of this kind in the South, in Washington County, Ga., was referred to as an interesting experiment at the Capon Springs Conference of 1900. Now enterprises of this sort have become prevalent. In one year, in Virginia, 200 small schools were consolidated into 60. In four years, in Tennessee, the number of schools was reduced by consolidation 630, while the number of teachers was increased 200. In Mississippi, each of its 75 counties has one or more of these consoli-

dated schools. In Louisiana 88 consolidations are reported, and some 50 wagonettes are employed in the public transportation of children living at a distance from the new schools.

High schools.—Closely joined with this has come the development of high schools. Given a good graded school, and the high school follows as a matter of course. In Virginia 303 high schools were reported in 1907 where were only 19 three years before. From Tennessee the report came of 32 such schools established in 15 different counties, with beginnings made in a dozen other counties toward the same end. In Louisiana the number had grown to 53, and in the two Carolinas systematic efforts for this object were meeting with abundant encouragement. Heretofore, because of the lack of good secondary schools, the colleges and universities of the South have felt obliged to maintain preparatory departments; it is now probable that such departments will soon be unnecessary, as these multiplying high schools will presently afford the opportunities requisite to qualify students for advanced courses.

Industrial training.—Marked progress has also been made in introducing industrial training into the public schools. The conferences have bestowed much attention on this subject, and especially on training for agricultural pursuits. The fruits are seen in the growing interest in a more practical education. The reports from Virginia, Mississippi, and Louisiana make particular reference to the introduction of agricultural features into their school courses, and in the other States similar efforts are common, if not as general.

School libraries.—Another mark of progress is found in the measures taken to provide school children with good books for home reading. More has been done for this object in some States than in others, but in all of them the establishment of school libraries has enlisted wide interest. Taking the reports from the different States together, we may fairly estimate that during the past five years some 5,000 libraries have been established in rural schools and that they contain about 500,000 volumes, costing $250,000. This does not take into account the libraries of schools in cities and large towns.

Training of teachers.—Systematic efforts for the better training of teachers have kept pace with the advance in other things. Legislation has provided for more careful examinations; teachers' institutes have grown more effective in their organization and management; the public high schools have raised the standards of general scholarship; thriving normal schools have multiplied their facilities and opened their doors to increasing numbers of students; all the State universities have established departments of education for training teachers, and summer normal schools have enabled teachers to use their vacations for study. Particularly noteworthy has been the work of the Summer School of the South, inaugurated at Knoxville

by the Southern Education Board and enrolling annually some 1,700 students. This and other similar schools have had an aggregate attendance of more than 5,000 teachers, who have thus received a professional training of great value. In accord with the better training there has also been an increase in teachers' salaries. In Mississippi, for example, the maximum monthly salary of a first-grade rural teacher has been raised from $55 to $75, and in Louisiana the average teacher is now receiving $23.97 a month more than three years ago.

Supervision.—Equally significant is the rising demand for more efficient supervision and better qualified superintendents. In North Carolina superintendents are expected to give their whole time to this work, whereas five years ago not a county superintendent in the whole State did so; and to secure this result salaries have been more than doubled, some being as high as $1,800. In Mississippi, where before 1904 the maximum salary had been $800, it is now $1,800, and the law provides that when a county superintendent has a salary of $1,200 or more he shall not pursue any other business of a public nature. In Louisiana, within two years two-thirds of the parish superintendents have resigned, and their places have been filled with "practical, up-to-date school men," who know their business and are alive to their work.

Meetings and school-improvement leagues.—Results like these, unfolding in so short a time, have a meaning that can not be questioned. But quite as impressive are the processes going on beneath—the growth of the popular sentiment which found such expression and the living forces which aroused and fostered this sentiment. A call went forth to a new order of universal intelligence, and the response was swift. Words of Jefferson were remembered and became the watchword of the bureau of information at Knoxville: "Preach a crusade against ignorance." And the preaching was everywhere. Among the foremost to speak was the press. The newspapers reported the earliest meetings to their multitude of readers, and as the work went on they made the crusade their own. Popular rallies for educational discussion became the excitement of every locality. Hundreds of these rallies were held in the different States—in Virginia 580 in a single year, and in Tennessee 300, with an average attendance of 1,000. Organization followed. In Virginia there are now 390 school-improvement leagues, and in North Carolina plans are being carried out for associations of this kind in every county and district. Other States are doing similar work with their women's clubs, which find a new motive for their energies in becoming earnest auxiliaries in the movement. Legislation has followed as a matter of course, and with it practical upbuilding in the numberless ways required.

DEFERENCE TO SOUTHERN LEADERSHIP.

Although a number of northern men have been associated with those from the South in the conferences and in the Southern Education Board, it has been the uniform practice to look to southern men for the direction of all efforts that have been undertaken. At the Winston-Salem Conference one of the papers, presented by a northern man, contained these words:

> The men on the ground are in the foremost place. They know the situation. They are familiar with conditions. They have sharpened instincts to sense the meaning of things that would be a snare to others. In agreement with them is strength. We have to wait for the master spirits of the South to bring in the new order. Our highest ministry is to work with them as sympathetic guests with open mind to enter into their plans and make them our own. * * *
>
> These men should recognize in what a position they stand and how much it means to have the anticipatory faculty for a new order that is coming. They should plan on a large scale and expect large things, looking for allies to join them from unknown quarters, and means to flow in for carrying on their undertakings as fast as they are ready.

The story of the Southern Education Board during these past seven years is in no way inconsistent with that foreword. Always the men on the ground have ordered the campaign as well as marshaled the forces at the front, and those at a distance have esteemed it their highest honor to render them a sympathetic support. Some of the master spirits who were earliest on the ground have passed, one by one, from their great leadership—Dudley, Wilson, Curry, Graham, Hill, Purves, and McIver—but under such losses there has never been a pause in the forward movement. Instead of the few conspicuous champions, compelling sometimes a hesitant and even unwilling attention, there have risen out of the ranks many hundreds of like spirit to direct the eager people in their resolute purpose.

With this multiplication of leaders on the ground, those who have afforded aid from a distance have withdrawn step by step into the background. Most of them are living. Only Baldwin has gone from their ranks. Their interest, too, is unabated, as is that of the large number who have joined in their helpful endeavors. Every token of progress in the great work as it goes on is a joy. But they are willing to see it from a distance. There was an illustration of this last December. A convention was called to meet at Atlanta for a careful review of the work and to discuss plans for the future, especially to decide what course to pursue with reference to an Eleventh Conference. There were present 10 State superintendents, 9 members of the executive committee of the Conference, 4 members of the campaign committee of the Southern Education Board, 5 professors of secondary education, and about 25 others prominent in southern educational work. In all, there were 53 present, and all but 3 were southern men. The discussions of this meeting, continuing for two

days, were such as might properly be connected with those of the larger conferences, for they were quite equal to them in practical power; but they were almost wholly by southern men. The action of this convention, also, in choosing Memphis for the Eleventh Conference is indicative of their courage and largeness of view. No previous meeting has been so far to the west, and none has been held in so large a city. The action looks toward extension of the movement into a comparatively new region, and this with the design of not only giving benefits but of gaining fresh incentives from association with kindred workers in the Mississippi Valley and the regions beyond.

A DOMINANT NATIONAL SPIRIT.

But while the direction and administration of these affairs are in the control of southern men, there are no indications of any narrowness or sectional spirit. All the trend is toward largeness. It is preeminently a product of present-day thought and feeling. It was born in the atmosphere of a healthy national enthusiasm, and it has breathed no different air. The habit of modern intelligence is to make every question a world question and to bring from everywhere the light of experience and observation to clear away the uncertainty. The South is proving no exception. There need be no fear of a return of sectionalism.

In every want of the South there is a want of the nation, and the entire nation is interested in having that want met. That is the underlying thought of this union of northern and southern people for educational ends. Through the wise education of all the people is to come the solution of all the nation's problems, and the problems peculiar to the South as well as others. A beginning has been made. It can be looked upon as no more than a beginning. But a method has been tried, and it has met the test. The same method can be followed with hopes of further successes. Continually in the conferences an outline has been given of something that ought to be done, and the people, catching the suggestion, have gone on to do it. With every fresh conference more such outlines appear, luminous ideals to be striven after and attained. The people have caught the suggestions every time and have been drawn on by them. There have been no backward steps, no dropping down from any high mark once set to something lower or less worthy. Is it too much to expect that this will continue? Shall not the law of educational life still hold and the course be ever toward a fuller because a more intelligent experience?

NOTE.—The Eleventh Conference for Education in the South was held in the Lyceum Theater at Memphis, Tenn., May 22–24, 1908. The several Southern States were represented by their State superintendents of education, the officers of their school improvement associations, presidents and professors in colleges, and persons

of influence in many other callings. Prominent among the speakers were General Luke E. Wright, Mayor James H. Malone, and Bishop Thomas F. Gailor, of Memphis; Chief Justice J. M. Hill, of Arkansas; Bishop T. D. Bratton, of Mississippi, and the State superintendents, J. D. Eggleston, of Virginia; O. B. Martin, of South Carolina; J. B. Aswell, of Louisiana, and others. Prof. P. P. Claxton, of Knoxville, Tenn., gave a graphic description of the methods of educational campaigning in the South; Miss Lillian Johnson, of Memphis, and Miss Georgia L. White, of Northampton, Mass., spoke on the higher education of women; Dr. Henry S. Pritchett, of New York, gave an address on industrial education, and the Hon. James Bryce, British Ambassador to the United States, spoke on popular education and national efficiency. Mr. Ogden, the president of the conference, made the annual opening address and presided over the conference with his accustomed grace. At the closing session a cordial invitation was extended by Governor E. F. Noel, of Mississippi, to hold the Twelfth Conference at Oxford, the seat of the University of Mississippi, and another invitation was given by the Hon. Junius Jordan to Little Rock, Ark. The place of the next meeting is to be determined in due time by the executive committee.

EDUCATIONAL PROGRESS IN SEVERAL STATES SINCE THE ORGANIZATION OF THE SOUTHERN EDUCATION BOARD.

NOTE.—The following statistical tables are from Proceedings of the Tenth Conference for Education in the South, pages 34-35, 37.

Expenditures for public schools.

State.	1900-1901.[a]	1905-6.[b]	Increase in 5 years.	Per cent increase.
Virginia	$2,012,359	$3,158,497	$1,146,138	56
North Carolina	1,152,920	2,291,053	1,138,133	99
South Carolina	961,897	1,404,474	442,577	46
Georgia	2,083,366	2,763,247	679,881	32
Tennessee	1,811,454	3,247,563	1,436,109	79
Louisiana	1,236,648	2,812,736	1,576,088	127
Total	9,258,644	15,677,570	6,418,926	69

[a] Report of United States Commissioner of Education.
[b] Reported by State superintendents.

In Alabama expenditures in 1900–1901 were reported as $923,464, and the estimate of the State superintendent for 1905–6 is $1,600,000, an increase of $676,536, which would be 73 per cent.

In Mississippi expenditures for 1900–1901 were reported as $1,472,433, but exact figures are not available for 1905–6, nor have we received an estimate from the State superintendent.

Local funds raised for school purposes.

State.	1900-1901.[a]	1905-6.[b]	Increase in 5 years.	Per cent increase.
Virginia	$985,877	$1,303,900	$318,023	24
North Carolina	15,949	448,775	432,826	2,714
South Carolina	142,459	269,162	126,703	89
Georgia	423,288	1,100,000	676,712	159
Tennessee	1,631,589	2,324,429	692,840	42
Louisiana	742,945	1,570,598	827,653	111
Total	3,942,107	7,016,864	3,074,757	78

[a] Report of United States Commissioner of Education.
[b] Reported by State superintendents.

In Alabama no report is available for 1900–1901; in 1905–6 the amount reported is $534,936.

In Mississippi the amount reported in 1900–1901 was $508,418; no definite report has been received for 1905–6.

Expenditures for public school equipments—Grounds, buildings, furniture, libraries, apparatus.

[United States Commissioner's Reports.]

State.	1900–1901.	1904–5.	Increase in 4 years.	Per cent increase.
Virginia	$187,301	$278,982	$91,681	49
North Carolina	61,689	296,892	235,203	481
South Carolina	62,895	140,169	77,274	123
Georgia (except cities)	87,952	162,722	74,770	83
Tennessee	131,615	261,529	129,914	91
Louisiana	60,036	419,852	359,816	582
Total	591,488	1,560,146	968,658	164

Estimated value of all public school property.

[United States Commissioner's Reports.]

State.	1900–1901.	1904–5.	Increase in 4 years.	Per cent increase.
Virginia	$3,603,634	$4,297,653	$694,019	19
North Carolina	1,335,658	3,182,918	1,847,260	138
South Carolina	990,000	2,000,000	1,010,000	101
Georgia	2,738,800	4,009,590	1,270,790	46
Tennessee	3,691,069	5,171,753	1,480,684	40
Louisiana	2,450,000	3,659,915	1,209,915	49
Total	14,809,161	22,321,829	7,512,668	51

The following table shows the amounts contributed by the board from year to year in the several States for the maintenance of the work conducted by the campaign committee, not including the general expenditures:

State campaign expenses of the Southern Education Board.

[From the books of the treasurer.]

State.	1902.	1903.	1904.	1905.	1906.	Total.
Virginia	$5,406.30	$5,838.87	$2,914.23	$2,327.07	$3,000.00	$19,486.47
North Carolina	2,975.99	4,297.59	2,996.89	3,146.30	2,434.08	15,850.85
South Carolina	.....	1,260.55	526.05	1,644.14	775.42	4,206.16
Georgia	175.00	1,265.73	1,238.75	887.42	2,505.74	6,072.64
Tennessee	.....	653.54	1,989.38	1,943.00	1,994.87	6,580.79
Alabama	900.00	400.00	1,046.29	1,345.30	1,203.75	4,895.34
Mississippi	.....	750.00	916.67	691.65	1,000.00	3,358.32
Louisiana	1,614.86	1,504.12	2,284.03	1,349.14	2,500.00	9,252.15
Kentucky	.....	.....	.....	438.02	218.73	656.75
Total	11,072.15	15,970.40	13,912.29	13,772.04	15,632.59	70,359.47

CHAPTER XII.

CHARLES DUNCAN McIVER AND HIS EDUCATIONAL SERVICES, 1886–1906.

By Charles L. Coon,
North Carolina Department of Public Education.

The glory of the struggle to which southern educators are called and the prospect of certain victory is such exhilarating inspiration that I feel sorry for those in other sections who have not the opportunity, and for those in our own section who lack inclination or the resolution, to participate in the struggle. (Charles Duncan McIver.)

HIS EDUCATIONAL SERVICES.

Here was a man of transcendent ability to move common men to believe in the saving efficacy of education as the most vitally civilizing force in our national life. Here was a man of large vision and constructive ideals who devoted all his time to unselfish service for his fellows. Here was a man whose sympathy and catholic spirit were broad enough to include all mankind. Here was an elemental man, a product of this generation of southern life rediscovering and re-forming itself, whose consuming ambition was to strive "for the perfection of civilization and the ennobling of democracy."

I. NORTH CAROLINA EDUCATIONAL CONDITIONS IN 1886.

Twenty years ago North Carolina was spending annually for public elementary schools, rural and city, $771,719 for 570,000 children. This small sum was divided among more than 6,600 different schools and 6,700 teachers. The physical equipment of these schools, including grounds and furniture and buildings, was somewhat less in value than $700,000. The average length of the school term was only 60 days out of 365, and the teachers were paid annually hardly $80 each. At least two-thirds of these elementary teachers were men. The total amount paid for the supervision of all these schools, including the nine towns which then had separate systems of their own, was a little less than $30,000 for the year; only about $19,000 of this amount was paid the 96 county superintendents for their services. At that time not a single county superintendent devoted all his time to school supervision on account of the meager salary paid, while less than one-fourth of all the teachers spent longer than three months out of each year in the school room.

Considerably more than one-fourth of the white population in 1886 10 years of age and over was illiterate, while at least 70 per cent of the colored population of the same age was illiterate. There were 23,000 more white female illiterates than white male illiterates.

Some regarded the public schools as a public charity. Some opposed them on the ground that they were purely secular and did not teach morality. Some declared that the public schools were not worthy of patronage. Still others opposed the whole idea of public education because the negro shared in the division of the public funds. In a word, the public schools were satisfactory to no class of people. The leading churches were then and later actively opposed to State support of higher education, because they held that the State, by such support, would enter into unfair competition with the sectarian colleges already established.

The University of North Carolina, partially and meagerly aided by the State, had been in existence for a century, but its advantages were not open to white women. There was no State-supported institution or endowed college in which a white woman could obtain higher education. The cost of higher education for a white woman at the then existing women's colleges ranged from $250 to $450 a year, twice the cost of education for a man at the State university and the endowed denominational colleges. And there was no State normal school of any kind for training white teachers, only an imperfect and unsatisfactory system of so-called summer normals of four weeks' duration.

What public school system there was in 1886 had been developed since 1870, while the State was yet suffering from the grinding poverty and social disorganization occasioned by the civil war and reconstruction. The battle cry of the dominant political party during these years was "white supremacy and low taxes." There were no public men of conspicuous ability who advocated increasing school taxes as the only means of increasing the efficiency of all the schools of all the people. In 1881 a law which permitted school districts to levy local school taxes by each race on its own property for the benefit of its own schools was passed. But even this measure, enacted to allay the supposed race prejudice of the whites against increasing taxes for negro schools, did not meet with great popular favor, for when the law was declared unconstitutional by the North Carolina supreme court in 1886, the white people of less than a score of towns and country districts had availed themselves of its provisions.

Such, in brief, were educational conditions in North Carolina which produced Charles D. McIver and that group of educational leaders and statesmen of his time. Their knowledge of these conditions impelled them to do the most unselfish and important public service undertaken during their generation. The story of their work for

North Carolina in broadening vision, for the moral and intellectual uplift of the people, and for engendering noble aspirations for the future can not be told here, nor can the story of their faith and courage in proclaiming the education of all the people as the only means of spiritual and economic freedom be fully emphasized. A mere outline of their work shall suffice.

II. NORTH CAROLINA EDUCATIONAL CONDITIONS IN 1905.

North Carolina is now spending $1,955,776 on her elementary schools, $1,426,552 on her rural schools, and $529,224 on her town and city schools. This is $1,184,057 more than was spent for elementary schools twenty years ago. Instead of 6,600 schools and 6,700 teachers in 1886, North Carolina now has 8,193 schools and 9,687 teachers. Instead of $700,000 worth of school property, she now has school property valued at $3,182,919. Each teacher is now employed on an average of 88 days out of 365 instead of 60, and receives annually $136.29 instead of $80. The 97 county superintendents now receive $53,024 instead of $19,000, and many of them are now able to devote all their time to the schools. The whole amount spent for supervision is now $110,016 instead of $30,000. Local taxes are now levied in 63 towns and cities instead of 9, while 354 country districts levy special local school taxes. There were no country local tax districts in 1886. The general State school tax is now 18 cents on each $100 valuation of property instead of 12½ cents. And every leader of the people, in whatever walk of life, is sincerely sorry these figures are not many times larger and the opportunity our schools afford for the training of our 700,000 children many times greater.

The State University now receives considerably more than twice the State aid it received twenty years ago. In addition, the State now largely supports an agricultural and mechanical college for each race, a State normal and industrial college for white women, two small white normal schools for both sexes, and three colored normal schools for both sexes, all at an annual cost of $131,000. Church opposition to higher education has passed away, and both political parties now pledge themselves to the most liberal educational policy. A public man who opposes raising more money for schools is an exception. More is now said during the political campaigns in North Carolina about education than about all other public questions combined. There is now an organization of women in nearly every county whose aim it is to beautify country school houses and grounds. There are now libraries of good books in more than 1,500 country schools, with a healthy public sentiment at work to make it impossible for any school to be much longer without such a prime necessity. And finally, the illiteracy figures of twenty years ago have been reduced to at least half

what they were then, while there are well-defined movements looking to compulsory school attendance and to the strengthening and better enforcement of the present child-labor laws.

Thus the record stands when put into cold statistics. But the influence of the revolution in public sentiment brought about by the educational statesmanship which this story reveals has been felt throughout the South. The commanding, compelling leader who should be seen in every line of this inspiring page in the progress of his State from the bondage of individualism toward democracy is Charles Duncan McIver, founder of the North Carolina State Normal and Industrial College and the most effective advocate of universal education since Horace Mann.

III. HOW THE FIRST BATTLE WAS WON.

Charles D. McIver began his life work as a teacher soon after his graduation from the State University in 1881. By 1886 he had become convinced that "the supreme question in civilization is education," and that "the cheapest, easiest, and surest road to universal education is to educate those who are to be the mothers and teachers of future generations." McIver did not discover these two fundamental truths; they discovered him to himself, and they made for him his message to the people he loved. For several generations Murphey, Caldwell, Wiley, and others had preached to North Carolinians the doctrine of the necessity of education. Pestalozzi and other educational reformers had emphasized the education of women as the teachers of the race. But no one had as yet been able to compel North Carolina to heed the message that was to spell the larger freedom of all its people.

It was Doctor McIver's unique distinction to carry to the people of his State three fundamental principles of educational statesmanship and to win for them a favorable popular verdict. These principles were as follows: "The teachers of children must have special training; the State must aid the higher education of women as well as men; the most necessary and expensive thing in the world, except ignorance, is education," and therefore the taxes for public education must be increased. These fundamental democratic principles he accepted as the very essence of educational truth, and he never once doubted that all men would accept them as he did if only they were rightly presented.

It took five years of agitation—from 1886 to 1891—to get a favorable verdict from the people on the propositions involving the training of teachers and State aid for the higher education of women. The establishment in 1891 of the State Normal and Industrial College meant nothing less than that the people of North Carolina had been convinced that teachers ought to be trained for their responsible work

and that the State ought to aid the higher education of women. During these years of agitation Doctor McIver spoke often on "Female education," "The duty of the people to their schools," "The teacher and the people," and "Taxation for schools," and held county institutes in all parts of the State. The North Carolina Teachers' Assembly and the late State Superintendent Finger rendered valuable assistance. But the most effective means used to secure the establishment of the State Normal College was the educational campaign which Doctor McIver and Dr. Edwin A. Alderman conducted in connection with their county institutes from June, 1889, to June, 1892. These institutes were held in nearly all the 96 counties. They lasted five days each. The final day was devoted to educational campaign speaking. An effort was made to have all the school officers and as many other citizens as possible attend these meetings on the final day of the institute. Never before had the people heard the subject of education so ably and attractively presented as it was presented by these two incomparable educational advocates. The people heard not flattery nor the glorification of a dead past. Instead they heard of the shame and blighting effects of illiteracy; they heard a new doctrine of the spiritual and economic meaning of education; they heard how necessary it was that the teachers of little children have the best training for the most important work of civilization; they heard how for a century the State had been aiding men to secure the blessings of higher education and denying the same privilege to women; and they heard for the first time in their lives men plead that taxes be raised instead of lowered. This campaign marked a new epoch in North Carolina history, for it was a campaign without appeal to race prejudice, without appeal to dead issues; it was a campaign free from the quarrel words of the past; it was an appeal for broader vision. It was a campaign the only weapons of whose warfare were persuasion and love; it was a campaign in which the only possible reward of those who waged it was the consciousness of an unselfish civic service performed primarily in the interest of little children. The appeal to the people was successful; the State Normal College was established; and the man who had done most to mold public sentiment in its favor, Charles D. McIver, was made its first president.

IV. LEADER OF THE SOUTHERN EDUCATIONAL CAMPAIGN.

The story of the founding and the growth of this college is the story of the growth of public educational sentiment in North Carolina during the past twenty years. The unique popular educational campaign which established the college and which revolutionized public thinking on the subject of education has continued to this day. The college, under the guidance of its president, has ever been the most vitally helpful and active educational force, standing for democratic

ideals of culture and civic service. It has constantly disseminated educational enthusiasm, and has been the means of enlarging more and more the numbers of those whose ideal is to stand for larger educational opportunity for all the people.

As "the city set on a hill can not be hid," so the altruistic spirit of the educational work in North Carolina soon attracted wide attention in the South and gave courage to many other southern men and women to undertake similar tasks. By 1900 kindred spirits throughout the North recognized the national value of the educational work being done in the South by many educational leaders and statesmen. It did not take long to formulate cooperative plans. At Winston-Salem in April, 1901, there was a conference of the ten educational workers and their friends. Doctor McIver suggested a platform of cooperative principles. The platform was a call for an educational campaign. The Southern Education Board to conduct the campaign was formed. The man who had been waging educational warfare in North Carolina for fifteen years was made the chairman of the campaign committee of the board. Then was actively begun throughout the South a face-to-face discussion which aimed to reach the hearts and consciences of men and persuade them to provide larger educational opportunities for their children. And again the weapons of battle are persuasion and love. The appeal to men is for broader vision and higher taxes; their reward, economic and spiritual freedom for their children. The whole meaning of this wonderful movement can not be expressed in more epigrammatic form than in the following words of its master spirit, Doctor McIver: "I know that the angels must rejoice over one civic sinner who repents of his selfishness and hatred of taxes and becomes an enthusiastic supporter of universal education by taxation."

This campaign has taught many men, North and South, to lay aside some outworn prejudices; it has given new hope and inspiration to those statesmen of the South who are convinced that education of the right kind is the only means of spiritual and economic freedom; it has been a potent influence in creating patriotic sentiment; and, finally, it has brought hope and courage to many a humble teacher struggling to tempt the young fledgelings to leave the nest of illiteracy for the purer air of intellectual freedom.

EDUCATIONAL CREED.

No appreciation of McIver's work would be complete without a glimpse at the soul of the man as he stood before the people. He had an inexhaustible fund of illustration, anecdote, and humor. But he impressed no one as a mere "funny man;" he was too intensely in earnest. Imagine, if you can, this man declaring, with all the earnestness of a Peter the Hermit and with wonderful wealth of illustra-

tion: "In a civilized country the value of land and land products is not so great as the value of mind and mind products; ideas are worth more than acres, and the possessors of ideas will always hold in financial bondage those whose chief possession is acres of land;" and you will perhaps be able to understand his power to convince men that "the supreme question in civilization is education." Hear him discuss The Meaning of Education in a Democracy:

Education is simply civilization's effort to propagate and perpetuate its life and its progress.

The generations of men are but relays in civilization's march on its journey from savagery to the millennium.

Each generation owes it to the past and to the future that no previous worthy attainment or achievement, whether of thought or deed or vision, shall be lost.

The more we can induce a man to do for himself for his better training the more will he be able to do not only for himself, but for others.

The child is the pearl of great price for whom we can afford to sell all that we have and in whom we can afford to invest it.

Education is not a charity. A boy or a girl can not be pauperized by giving him or her a chance to drudge for a period of fifteen years at the hardest labor ever done.

Let us teach honestly and boldly that education is not only the best thing in our civilization for which public money can be used, but that with the exception of ignorance it is also the most expensive.

Men now seek education, not that they may become leaders in the State and in the church, but, first of all, that they may become strong men; so that to-day seeing a man at college is no indication that he expects to be a preacher or a politician.

Universal education means that every youth should have an opportunity to measure his mental powers in comparison with the mental powers of his fellows, and that he should thus be aided in discovering the work for which he is best fitted, and then that he should have special training for that work.

Before the war no man was allowed to educate a slave, because they said it ruined him and rendered him unfit for work. Education is a hindrance to slavery, and ignorance a necessity to it.

Education can not be given to anyone. It can not be bought and sold. It is as personal as religion. Each one must work out his own mental and spiritual salvation. This is the fact that makes democracy possible. It is the salt that saves the world.

We and our fathers have too often thought of a State as a piece of land with mineral resources, forests, water courses, and certain climatic conditions. The future will recognize that people—not trees and rocks and rivers and imaginary boundary lines—make a State, and that the State is great, intelligent, wealthy, and powerful, or is small, ignorant, poverty stricken, and weak, just in proportion as its people are educated or as they are untrained and raw, like the natural material around them.

TAXATION FOR SCHOOLS.

And this is how he made men see that higher taxation for schools is a necessity:

I know that the angels must rejoice over one civic sinner who repents of his selfishness and hatred of taxes and becomes an enthusiastic supporter of universal education by taxation.

Money is worth nothing without ideas and ideals, and yet ideas and ideals can make little headway in promoting civilization without the sympathy and cooperation of wealth and wealth producers.

The aversion to taxation is due to ignorance of the fact that taxation is simply an exchange of a little money for something better—civilized government. The savage alone is exempt from taxation.

The majority of the schools of the South need and need badly: Better houses and equipment, longer terms, stronger teachers, and more effective supervision. Reducing these needs to a common denominator, we have four distinct calls for more money. Not only is it a call for more now—one time—but for all time.

We have heard in ancient days that it is robbery to tax Brown's property to educate Jones's children. In the future no one will question the right of the State to tax the property of Brown and Jones to develop the State through its children.

It has been too common a political teaching that the best government is that which levies the smallest taxes. The future will modify that doctrine and teach that liberal taxation, fairly levied and properly applied, is the chief mark of a civilized people. The savage pays no tax.

Can you make Georgia a greater State without making Atlanta greater, stronger, and freer? Is it not the duty of Atlanta and of every other city and community in the Southern States which has found it wise and profitable to levy a special local tax to educate its children to use every possible legitimate means to persuade every other community in the South, large and small, to do the same thing?

EDUCATION OF WOMEN.

Doctor McIver believed that universal education was somehow intimately connected with the proper education of women. He was never more irresistible than when he declared:

The cheapest, easiest, and surest road to universal education is to educate those who are to be the mothers and teachers of future generations.

An educated man may be the father of illiterate children, but the children of educated women are never illiterate.

The proper training of women is the strategic point in the education of the race.

Men have had the exclusive management of court-houses and largely the exclusive management of schoolhouses, and upon both the marks of masculinity and neglect are plainly visible.

Educate a man and you have educated one person; educate a mother and you have educated a whole family.

Not a shadow of doubt has ever dimmed my faith in the final wisdom and justice of the people of the State, and I look with confidence to an early day when they will invest in the training of white women at least as liberally as they do in the training of white men, colored men, and colored women.

The chief factors of any civilization are its homes and its primary schools. Homes and primary schools are made by women rather than by men.

For every dollar spent by the government, State or Federal, and by the philanthropists in the training of men, at least another dollar should be invested in the work of educating womankind.

Many of the States established their State college for men nearly a hundred years ago, and after a century's development along the line of masculine tastes and needs, those in authority seem to think that if, without modifying the courses of study in the slightest, they decide to admit women, it is a mark of great generosity and progress.

The wife and mother is the priestess in humanity's temple and presides at the fountain head of civilization.

We could better afford to have five illiterate men than one illiterate mother.

I have yet to find the ambitious man who is suffering in his mind because he is not allowed to become a student at a woman's college.

An educational qualification for matrimony would be worth more to our citizenship than an educational qualification for suffrage.

A Southern woman once told me that she had decided to use her money to aid in the education of boys and men—that her husband was a man!

ILLITERACY.

The burden of our illiteracy formed a part of every public address which he made. Some of his epigrammatic utterances on this subject are well worthy to live:

Ignorance and illiteracy cost more than education.

North Carolina's two ancient enemies—illiteracy and hostility to taxation.

There is no comfortable place in civilization for men and women who can not read and write. The instances to-day of extraordinary successes among illiterate people are rarer than genius itself.

In a section where one-third of the population above 10 years of age can not read and write, the removal of that handicap is the very first public question with which our Christian benevolence and statesmanship must deal.

I have heard people talk as if industrial education were possible for illiterate people. Just as well talk of a law school or a medical college for illiterates.

THE TRAINING OF TEACHERS.

Doctor McIver held that the teacher is the most useful member of our society, and that he must be trained:

The school-teacher is our most important public official.

The teacher is the seed corn of civilization, and none but the best is good enough to use.

The person who builds citizens and shapes the character and thought of the young is worth more to society than the man who builds houses and molds iron.

Those who teach the young are civilization's most powerful agents, and society everywhere ought to set apart and consecrate to its greatest work its bravest, its best, its strongest men and women.

The teachers of this country must learn to become tactful mixers with men and active agitators for more liberal educational investment.

We have passed away from the time when the old woman, being asked how many children she had, replied: "Five—two living, two dead, and one teaching school."

We are laboring under the delusion that we can save money by employing low-priced teachers. North Carolina and all other States still regard a carpenter or an ordinary laborer with very little skill as deserving better annual compensation than is paid to our elementary teachers who are the builders and sustainers of our civilization.

The school-teacher should be not only the teacher of the youth of his community, but also the most influential adviser on all matters of legislation that pertain to schools and the rearing of children into useful citizenship.

It is the business of teachers to hand down from one generation to the next the best that their own generation can do and know and be and dream. They are the seed corn and none but the best and strongest is good enough to be used.

Every community has its hero physician, its hero lawyer, its hero banker or business man, but the hero school-teachers are dead!

A person who has the right kind of education will want other people to have it too. This is the spirit of the true teacher, who, in his heart, must be a genuine philanthropist.

We must not only do our duty in the class room, but let us use our influence as citizens to pursuade the men and the women of to-day to discharge their debt to the generation that has preceded them by the most liberal provision for the generation that must take their places.

There are people who seem to think that a little child's time is worth nothing, and waste it by putting it in charge of a teacher without skill and inspiration. Six or seven years of a child's life wasted means sixty or seventy years of effective manhood or womanhood wasted.

A weakling can not train boys and girls into great men and women whose education has economic value. We must have masters as teachers.

There are people who are as naturally avaricious in regard to helping others see truth as others are naturally avaricious in a pecuniary way. They would, if possible, get up a corner in knowledge and keep it from the rest of the world in order to gain power for themselves.

I do not want my children taught geography by a person who has never been outside of the Congressional district in which she is teaching. I do not want my children to be taught the relation between capital and labor by a man or a woman who never expects to see more than $150 or $200 capital for a year's salary.

Of all the skilled workers in the world the teacher is probably the only one who is ever refused the privilege of selecting the tools with which he will work or the weapons of his own warfare. I have seen text-books decided upon by a committee, not a member of which had been in a school for twenty years, and the committee's only influential adviser seemed to be a lawyer who was paid an attorney's fee to give the advice. Imagine, if you can, carpenters allowing brickmasons to select their tools, or fishermen allowing field hands to determine for them the character of their fishing tackle or the bait that shall be used!

EDUCATIONAL LEADERSHIP.

Of educational leadership he said:

Aggressive educational statesmanship among teachers and public officials is the need of our time, and every Southern State that has not developed such leaders will do so within the next five or ten years.

The county superintendent should be a man who can win the confidence of the intelligent, lead the ignorant and illiterate, and give hope and inspiration to plodding men of mediocre ability and position. In argument on general questions, he should be able to hold his own with the strongest professional or commercial men he may chance to meet; and in the discussion of educational questions he ought to be more than a match for them. He ought not to be a mere examiner of teachers or a gatherer of statistics.

HIS IDEAL OF A COLLEGE.

Doctor McIver's ideal for a great and useful college was thus expressed:

The love of truth for truth's sake; the belief in equality before the law; the belief in fair play and the willingness to applaud an honest victor in every contest, whether on the athletic field or in the class room or in social life; the feeling of common responsibility; the habit of tolerance toward those with whom one does not entirely agree; the giving up of small rights for the sake of greater rights that are essential; the recognition of authority and the dignified voluntary submission to it even when the reason for the policy adopted by the authority is not apparent; the spirit of overlooking the blunders of others and of helping those who are weak; the contempt for idlers and shirkers; the love of one's fellow-workers, even though they be one's rivals; patience in toil; self-reliance; faith in human progress; confidence in right; and belief in God—these are the characteristics of the atmosphere of a great and useful college.

SOME PERSONAL PREFERENCES.

Some personal preferences he phrased thus:

I'd rather be a what's-what than a who's-who!

I am not a prophet. I prefer history to prophecy, and I prefer the work of the present as a preparation for the future to either.

When a man is on the right road it is not of great importance whether he be at one point or another. The direction in which he is moving and the rate of his speed are the important questions.

I would rather be a healthy man at the foot of the mountain advancing steadily and with the upward look of hope and faith than to be a corpse on the peak, or the blasé traveler who has gone over the entire road and is slowly descending while possessed with the delusion that he is standing still on the summit.

BIOGRAPHICAL.

Born in Moore County, N. C., September 27, 1860; died near Hillsboro, N. C., September 17, 1906. Student at the University of North Carolina September, 1877, to June, 1881. Awarded Greek medal at university; won honors in French and Latin; graduated with B. A. degree. Taught in public and private schools of Durham, 1881–1884; cast his first vote at Durham in May, 1882, in favor of a local tax to establish the Durham public schools. Taught in the Winston public schools, 1884–1886. From September, 1886, to June, 1889, he taught in Peace Institute, Raleigh. State institute conductor and chairman of North Carolina Teachers' Assembly Committee on Education 1889–1892. President of the State Normal and Industrial College 1892–1906; member of the Southern Education Board and chairman of its campaign committee 1901–1906; member of the National Educational Association and of the National Council of Education. He was president of the North Carolina Teachers' Assembly, 1892, and of the Southern Educational Association, 1905. Married Miss Lula V. Martin, of Winston, in 1885. Held the honorary degrees of Litt. D. and LL. D. from University of North Carolina, conferred June, 1893, and June, 1904.

CHAPTER XIII.

THE SCHOOL PLAYGROUNDS OF AMERICA.

By Henry S. Curtis,
Secretary of the Playground Association of America.

Contents.—Playgrounds for rural schools; Playgrounds for village schools; Playgrounds for city schools; Playgrounds for high schools; Playgrounds for private schools; Athletics in colleges and universities; Important titles in the bibliography of school playgrounds.

THE GENERAL ATTITUDE TOWARD PLAY.

The typical English school is a boarding school for the sons of gentlemen; it is located in the country. In it cricket and football are compulsory, and it has playgrounds large enough for every pupil to play at once. Its educational ideal is culture. The German gymnasium is a day school located in the city. It is generally without a playground. Its system of physical training is by gymnastics, and its educational ideal is learning. The American system keeps a middle line between these two. Its ideal is more largely learning than the English and more largely culture than the German. In our higher education we have the German university superimposed on the English college. Our athletics also have characteristics of both countries.

The northern part of this country was settled largely by the Puritans. To them games were a useless distraction of the mind from serious things, which was little better than sin. Their brethren in England during the epoch of the Commonwealth nearly stamped out the games of the mother country, and it is not surprising that games were not encouraged in early New England.

There has been nearly a complete absence of appreciation of the value of play in America until very recent years. Even to-day nine-tenths of even moderately intelligent Americans regard play simply as an amusement. They do not see in it a great system of physical training which is throwing down its challenge to Swedish and German gymnastic systems. Still less do they see in it the great social arena where friendships are formed and cemented and where the child is fitted to become a member of society. Least of all does the ordinary American suspect that the field of play is the school of character in which the habits of childhood and youth are chiefly formed and their tendencies fixed.

Under the circumstances it is not strange that there has been no attempt to get every child to play baseball or any other organized game. It is largely a matter of indifference to teachers, and of very slight or only negative interest to parents. Football has been generally discouraged both by parents and teachers. Football and cricket are as carefully taught in England as Latin or Greek; but baseball and football are entirely untaught in America for the average boy. It is only the boy who becomes so expert as to win a place on some prominent team who receives any coaching. There is no public school in America, to my knowledge, from the elementary school to the university that has ground enough for one-tenth of its students to play baseball at once. Strangely enough, this does not seem to have occurred to anyone as necessary or even desirable. A high school or college with a thousand students thinks itself magnificently provided for if it has a field 10 acres in extent, and there is not one school in ten that has even that. Eton has 200 acres of playground for its 1,000 students. There is comparatively little participation of the teachers in the games of the children, whereby the school loses one of its greatest educational possibilities in the training of character. In the American high school and university athletics is practiced by the few, representing a selected class, who do so not for pleasure, or for health, or in any way for the good of the individual, but for the glory of the school. However, the present is a time of great awakening and interest in every field of athletic sports, and it is impossible to predict what the near future may have in store for us.

PLAYGROUNDS FOR RURAL SCHOOLS.

The place where the encouragement of games would be easiest but where the least interest is seemingly felt is the rural school. The present condition is pathetic. In my acquaintance with rural schools throughout the East and the Middle West I do not know of a single school with a yard playground large enough for a game of baseball. In many places the ground could be had for a song, and the saving in annoyance to residents in the vicinity would more than compensate for the extra cost, but it simply has not occurred to the community at large that such a playground is desirable.

So far as my knowledge goes, the idea of physical training is almost completely lacking. The farmer expects that his son will become strong from farm work, and he sees no further object to be secured. The school journey, too, which on the Continent of Europe combines so much healthful exercise with travel and observation, is almost unknown with us.

The boys in rural schools seldom receive any instruction in playing baseball, and as a consequence they play the game badly, although they constitute excellent material, as they are generally strong and

have had a great deal of practice in throwing stones from infancy; but this is not the worst of it, they do not learn to play the "gentlemanly game," as the English say. Baseball does not train them in courtesy and fairness and subordination and cooperation, as the English games train English boys.

In Queensland, Australia, a public school usually has from 5 to 12 acres of playground. No space of less than 2 acres is deemed sufficient. It seems to me that no country school with less than 2 acres of playground should be allowed to draw public money.

We hear much of measures to relieve the poor in great cities, to raise the moral standard, and the like, but we hear little of similar activities for country people. What is the meaning of the great tide of emigration that is setting from the country to the city? Does it mean that the people of the country are deceived as to the pleasures and profits of city life? Is it merely the illusion of a change of which the future paints a brighter picture than the lapse of time discloses? I believe not. The movement is a rational one and will continue. It is very unfortunate, because new farm blood is necessary, and anything which leads to a decline of the rural population inevitably leads in the end to the decline of the country itself. The farm boy, however, is not the subject of illusions. He finds that the farm is not furnishing him with the interests essential to a wholesome life as a social being. On the continent of Europe the farmers live in rural villages, where they have a larger opportunity for social intercourse; but in America, the farm houses are scattered over the country, often half a mile apart. In the grind of farm work there is little that stimulates the mind and attention. For the farmer's wife and the farmer's daughter the number of interests are still more limited.

The farm must be made more attractive. There must be greater opportunity for social intercourse. There must be genuine interests to hold the attention of the farm boy and girl if the present tide from country to city is to be stayed, and if the youth are to become moral men and women.

The city has its temptations, but no one vice can well monopolize the whole thought. While the temptations of country life are few, they are intense, and they have almost no rivals. What is the country youth to do at night and on holidays? He can not be chained forever to the treadmill of farm routine. Such a life is mental suicide. Would you have him loiter about the grocery stores in the afternoon and the dance halls in the evening? If you would not, then you must give him some other diversion. Would you have him talk and think and plan impure things? If you would not, you must give him some other interest to take their places, some masculine enthusiasm that will use his stored energy and give him amusement at the same time.

Few perhaps realize the solitariness of country life and how contrary it is to the spirit of recent evolution. Country neighborhoods must have some social center, some gathering place where the people can and will assemble. It has often seemed to me that the people who were building social halls were building them in the wrong places. The people in the crowded city slum do not need these things half so much as the people on the farms do.

There is a great opportunity in connection with the new township schools that are now building in so many rural communities. Let these be made real neighborhood centers for communities which are in great need of such facilities. Let them be used for socials and lectures at night. Let them contain picnic grounds for the parents, and let them have ample playgrounds that shall always be open to the children.

No playground of less than 5 or 10 acres can be sufficient for the needs of the school, as a school, and with a ground of this size it can be a social center and a regenerating force for the whole community. Let it be ever open for games for all who wish to play. Let it have a grove for picnics to which adults can come on their holidays and afternoons, while children use the playground. Let it have shelters for sudden rains, and let every encouragement be given to social intercourse. In this way this ground would combine the advantages of the German beer garden and the English athletic field. It would mean society to the parents and would keep many a boy from wrong acts and thoughts. Ultimately I believe it would do much to stay the tide that is flowing from the country to the city, for it would make farm life more pleasant for all.

In Far Hills, N. J., a town of some 200 inhabitants, there is a country playground of several acres, which was donated by Mr. Schley. This playground serves as a center to which the people come for their festivities in the spring and for various other occasions. It is used by ball teams from the whole countryside, and, in short, serves a very great social purpose for the county. It is to be hoped that such gifts may become more common in the future than they have been in the past.

Perhaps the most interesting experiment which has been made, however, in the way of maintaining a country system of playgrounds, has been the experiment of Mr. Scudder, principal of the New Paltz (N. Y.) Normal School. From his investigation of the country children, Mr. Scudder came to the conclusion that the country boys at the present time were not receiving the physical training from their farm work that they needed; that they knew but very few games and that these were not of a high social order; that the country boy was unduly awkward in meeting other people with whom he was not well acquainted. All of these things seemed to Mr. Scudder faults

that should be overcome; so a little more than a year ago he founded in Ulster County a country school athletic league on the plan of the Public School Athletic League of New York, whose standard he adopted. Many of the country parents objected at first to the boys taking part in athletic events. They said that their sons developed their muscles on the farm, but in applying the test Mr. Scudder was not able to find a single boy who was equal to the standard. He did everything in his power to arouse an athletic enthusiasm throughout the surrounding country, with the result that he was finally able to hold a play festival in the spring, which was attended by thousands of children and parents, and an amount of enthusiasm was manifested which is seldom equaled in any city meet. The whole county is looking forward to a similar meet this spring, when they expect a larger crowd of adults and more children to participate.

The students in the normal school are all being taught to play the common games and to take part in athletic events, so that they may be able to develop these interests in the children. In fact, the country playgrounds of Ulster County have been one of the most conspicuous successes of the past year.

PLAYGROUNDS FOR VILLAGE SCHOOLS.

The village school is also practically without a playground. The plot of ground called by that name is only large enough for standing or walking about in. Baseball is out of the question for even one team out of the thirty or forty that ought to exist in the school. Here the question of expense needs to be considered, but if the school is located near the corporate limits of the village, as it should be, the cost need not be excessive. The 10 acres of playground, which should be the minimum for a school of 500, would be the most productive land in the village. It could be used in school hours by the children and out of school hours by the whole community. It would make the village cover a little more ground, but its ultimate effect would be to increase the value of all the property by furnishing a public park and by promoting matched games and attracting crowds on holidays. On the moral side it would be a rival, not to the saloon only, but to every evil institution and habit in the whole community. It may be said that the villages could not afford to purchase the land. The English villages do afford it and why should not the American? Land is cheaper in America and the communities are wealthier. In a village in which there is no legitimate amusement open to the public can it be expected that the youth will grow up virtuous and sober? We hear the saying, "God made the country and man made the town, but the devil made the little country village." There is truth in it. Conditions are bad in the village, but we could not expect them to be different. Youth does not gravitate toward virtue as water seeks its

level or as the sparks fly upward. If we handicap virtue vice will always win in the race.

Doctor Hall, in his book on "Adolescence," says of play:

> Activity may exalt the spirit almost to the point of ecstasy, and the physical pleasure of it diffuses, irradiates, and mitigates the sexual stress just at the age when its premature localization is most deleterious. * * * The zest of it [play] vents and satisfies the strong passion of youth for intense erethic states. Crime in our great cities is to a great extent simply a question of athletics. The question of playgrounds is not merely the question of play, health, and strength, but it is the question of virtue as well.

What play we have largely fails of its aim, also, because it is not taught. Our boys do not learn that sportsmanship means fairness and courtesy and obedience to the laws of the game, subordination to the captain, and cooperation with the other members, and to play for the team and not for the grand stand, as every English boy is taught on the field. Is it too much to ask or to hope that in the future we may so arrange our school programmes that every man teacher may spend two or three of the school hours on the field with the boys every week? The educator says we have not the time; but is this true, when we consider that it means health, social training, and character to the boy, and that it puts the whole school with its discipline and personal relations on a kindlier basis? We can not compare play, with its coincident physical and moral training, with a single subject like geography. It deserves to be compared with all of the other subjects combined.

PLAYGROUNDS FOR CITY SCHOOLS.

We have seen that the conditions of play are bad in the country and in the villages. There it is the result of a failure to perceive the value and need of playgrounds. In the cities the conditions are worse. Here they are not the result of indifference, at present at least, but of the almost prohibitive price of land. A certain school building in New York cost $150,000; the plot on which the building rests, without external playgrounds, cost $300,000. It is expensive turning such land into playgrounds. The boys of lower New York often go 10 or 15 miles to a ball ground, and then they are by no means certain of securing a game. The older schools of New York, which accommodate from 2,500 to 5,000 children, are often provided each with external playgrounds of not more than 25 to 40 feet square. The children would have to stand on each other's heads about four deep to even get on the playground. Besides this small exterior court, the first floor of the school, or basement as it is called, is covered with asphalt and is used for play. This ground is much larger than the other, of course, but it is never well lighted and is often dark and gloomy. The newer schools in the crowded districts of New York have roof playgrounds, which are used by the children occupying the two top

stories of the building. The new schools are built in the form of a letter H. This gives space between the legs of the H for two external playgrounds, which are much larger than the older ones. These are usually about 80 by 60 feet in dimensions. The new schools are also provided with well-equipped gymnasia, which are often used for basket ball after school. Conditions similar to those I have described exist in all of the large cities of America. Few have such magnificent school buildings as New York, but many are equally destitute of playgrounds. Not only are our city playgrounds small but they are essentially unattractive. They are for the most part unshaded, generally without shrubbery or flowers, the ground is often muddy and unsurfaced, or if not, is covered with gravel, cinders, cement, or brick, either of which furnishes a very poor surface for a playground. Of late years the school garden movement has done something to make the yards more attractive, but this has reached only a small number of them.

Mr. George Wittisch, supervisor of physical training in St. Louis, says of that city, "Games are simply out of the question for the present. Most of the yards are so small that the children have just room enough to walk about comfortably during recess."

Of recent years there has been a tendency to introduce games to be played under supervision or leadership of a teacher during intermissions. In New York there is a graded curriculum of games for use in the yard. At present this is largely suggestive, but it can not fail to have a great influence on the system in the end. In the lower grades about an hour is given to directed play in the yard in a large number of the schools. In Washington there is a curriculum of games in which the teachers participate during recess. The Boston Board of Health recommended last year to the Board of Education that thereafter the school day for the small children should consist of the forenoon only and that the afternoon should be given to directed play under their regular teachers. President Roosevelt said in his letter to the Washington Playground Association, "I hope the time may soon come when every school system will make provision at the school itself, and during school hours, not merely for the education but also for the recreation of the pupils." I believe that our present knowledge of the value of play warrants such provision. Children in the primary grades will get along quite as fast in their studies with an energetic teacher for three hours and good vigorous play for two or three hours afterwards as they will with five hours in school. In German cities school children under 10 now go home at 11 o'clock and children under 12 at 12 o'clock. The work they do in the afternoons is not of a sort to tax their minds. The tendency is to introduce more games in connection with gymnastics, also.

Besides this utter absence of school playgrounds, lower New York has been without playgrounds of any other kind until the past few years. Similar conditions have existed in all our great cities. There has been no place for play or for the children.

One of the good things that has come with the vacation playground movement has been a propaganda for yards in connection with all schools. Before the school grounds were open for play during the vacations they were used scarcely at all except for the assembling the children before they were marched upstairs to their class rooms, and there seemed no reason for acquiring large playgrounds.

The following was included in a law passed by the legislature of the State of New York in 1895:

> Hereafter no schoolhouse shall be constructed in the city of New York without an open air playground attached to or used in connection with the same.[a]

There is also a movement at this time to secure roof gardens for all of the old schools in the crowded parts of the city wherever such provision is possible. In 1907 the Board of Education of the District of Columbia passed a resolution that thereafter all new schools should be provided with at least 30 square feet of playground for each child in the school, and that playgrounds should be acquired for the older schools as fast as such grounds can be secured. The school budget for 1908 asks for an appropriation for the purchase of playgrounds for twelve of these older schools. In 1900 the common council of Chicago voted it was the sense of that body that the board of education should secure playgrounds for all schools wherever it was possible. In 1904 fourteen playgrounds had already been acquired under this new law. In 1903 Philadelphia passed a resolution that in the future all new schools in outlying districts shall be provided with "ample playgrounds." Most of the rules are not satisfactory in that they do not set a minimum of playground space per child below which no school is allowed to fall. But they are interesting as signs of the present interest in the matter, and because even now they are promising so much better conditions than have previously existed. The legal minimum space per child in Munich and several other German cities is 25 square feet. The legal limit in London is 30 square feet, but in practice it is about 40 square feet per child in the new schools. Some of the cities of Japan have a rule requiring 6 feet square or 36 square feet of playground for each child in the school.

To provide the new schools of New York as amply as the London rules specify would require at least a block to a school, and often two blocks would be barely sufficient. Public School 188, with 5,000 children, would require nearly 4 acres of playground. The

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[a] Laws of the State of New York, 1895, chapter 338.

buildings are put up so high, and in consequence such a great population is assembled on a small area, that it becomes almost impossible to meet the need of the children for play space. The population of parts of the lower East Side, New York, is twice as great as that of any similar area in London. It becomes necessary in order to handle the traffic to make the streets three stories high, with subway, surface, and elevated cars, and still the congestion during business hours on all of the three levels is very great. It seems quite evident that in a section of the city where the child population is nearly a thousand to the block it is quite impossible to provide playground facilities with a one-story playground.

In order to relieve this condition Doctor Gulick has advocated the erection of "skyscraper playgrounds." The building which he proposes would have the first five stories devoted to business purposes, then a succession of stories for day nurseries, kindergartens, and games for older children, and, finally, at the top, a normal training school for playground workers, with library and museum on this special subject. It would require about $2,000,000 to erect the structure, and thus far the money has not been forthcoming. This would be a very interesting experiment, though doubtless there are many kinds of games that could not be enjoyed in such a playground. Certainly ample provision could be made for ring and tag games, as well as such games as tether ball, volley ball, basket ball, and indoor baseball, for tennis and general football practice, and for all sorts of gymnastic drills.

As they have been provided and managed, school playgrounds have often been of but little value, for until a short time ago they were in many cases used only for assembling the children before school and at recess. For such purposes it was felt that the city could not afford to purchase large playgrounds, but at the present time we realize that there are many other uses for the playground; that the school needs the space in order to secure light and air, and for protection from fire and from the noises and disturbances which come from contiguous buildings. It needs the space for gymnastic drills, which we are coming to take more and more in the open air whenever possible. It needs a part of the ground for school-garden purposes. It needs it for organized play after school, and during the summer vacations for the training which it gives in character, which is not less important than the training of the curriculum.

Much may be done to alleviate present conditions, but it would seem that the playground problem is well nigh insolvable for such a city as New York. Where ground is worth a million dollars an acre it can scarcely be expected that the city will purchase it for ball fields. Basket ball, volley ball, and indoor baseball are doing much to relieve the problem because they are good games that can be played

in a small space or in a gymnasium; but the solution of the problem rests with the transportation companies more than with any other single agency. If cities could obtain quicker connection with their suburbs, central schools might acquire out-of-town playgrounds on the London plan. Then reduced fares on the transportation lines on holidays and after school would be a great help.

PLAYGROUNDS FOR HIGH SCHOOLS.

Our public high schools have the hardest conditions to face. Because they draw their pupils from different sections of the cities, most of them are centrally located. The adjacent ground is too valuable to be purchased for a playground, and surburban grounds are generally inaccessible. Those concerned in the management of high schools are beginning to realize the gravity of the situation, and it is to be hoped that in future more favorable locations may be secured near open spaces or parks. The whole movement is new, and high school athletics is yet in a very anomalous state. Considering their location and recent organization, the high schools have done well. Nearly all have baseball and football teams, and some even have crews, but they have to face a problem in their athletics which is very nearly insolvable. The high schools usually have to use such space as they can secure in parks or to rent private grounds at a rather high rental. The first of these arrangements is seldom satisfactory, because the teams can seldom be sure of exclusive use of park space, or even of the use of it at all during the times when they want it most. The second alternative is not satisfactory because of its expensiveness. Neither of these alternatives is satisfactory because of the time taken to go to and come from the grounds. The children of lower New York spend on an average more than an hour each way in going to and coming from the most available ball grounds. Under the circumstances it is not surprising that the number of high school boys playing on baseball or football teams is less than 3 per cent of the pupils in New York. The number playing on any team in any one day is, I suspect, considerably under 1 per cent. Furthermore, those who play are the ones who need the game the least, for they are the ones who are already strong and robust. On the whole, from the educational standpoint the system seems scarcely worth considering. Its purpose is the glory of the school, not the recreation or development of the individual.

In general, athletics is placed under the supervision of one of the teachers of the school. He acts as an adviser of the boys in all they undertake. He personally coaches them on the field and determines the athletic policy for the season. This is often a severe tax on the teacher's time, and thus far few principals have found a way to compensate the teacher by lightening his scholastic work. The various

expenses of the teams are usually paid from the receipts of the athletic association and from the gate receipts at the games. This is quite opposed to the English principle, which is that players must bear their own expenses or lose caste as amateurs.

The amount of time spent in training in the high schools is not usually excessive. It seldom amounts to more than six to nine hours a week, not including Saturdays. But athletes are not often excused from gymnastics. It is a common feeling of teachers that the scholarship of athletes is a little below par. There is certainly no reason in the amount of exercise taken which should make this true unless the play interest becomes excessive and drives out all scholarly interest. The real explanation, I believe, is that at the present time athletics is attracting to the high school boys without scholastic interest, or is retaining them in the high school when they have not the interest or ability to continue the work. Poor scholarship in that case is not due to the time taken from study, but to the fact that the athletes are essentially a different class of pupils from the others. Most schools require that athletes must maintain a certain grade in order to retain their positions on the team; that is, most schools require it on paper. It is to be feared that the rule is often very leniently enforced.

The playground problem of the high school is a peculiarly grave one, because the schools are centrally located where the land is expensive, and because boys are at an age at which they need to play the great team games of baseball and football. It is the same problem that the German gymnasium has to face. To equip the De Witt Clinton High School of New York with as good and ample a playground as Eton has would require 600 acres of land that would cost probably $300,000,000. If old English Rugby, or association football, or volley ball could be introduced into the high schools so that one class could be set to play against another for a regular school period in place of gymnastics, it would multiply many times the efficiency of the playground for the needs of the school.

PLAYGROUNDS FOR PRIVATE SCHOOLS.

The English "public schools" are usually situated in small towns where the boys can see something of nature and play in the open air; the American high schools are usually situated in the central parts of great cities and are almost without playgrounds. When we consider that many Americans entertain views of life and its conditions that are similar to the English ideals, we should expect that there would be schools in America like Eton and Harrow.

In this we are not mistaken. I am not prepared to say how many such schools there are, but I know of 12, and I doubt not there are several others of very recent formation, since at least 3 of those

of my acquaintance have been founded within two years. These schools are largely Episcopalian schools. They charge tuition fees varying from $600 to $900 a year. Their membership ranges from 100 boys in the smallest to about 600 in the largest. For the most part they are in the East. They are situated either in the country or in small towns. They are for the sons of well-to-do Americans and seek to give culture and social graces at least as much as they aim at scholarship. Some of them have a limited membership. For instance, the Groton School has a membership limited to 150, and a boy has to be registered practically as soon as he is born in order to find admission when he is 12 or 14. In this particular school, however, 14 boys out of about 25 received each year are now admitted upon competitive examination in accordance with a rule adopted in May, 1907. In this school play conditions are almost the same as in the public schools of England. Every boy is supposed to take part in athletics, and the masters play with the boys. The school teams are chosen from the masters and pupils indiscriminately, according to the excellence of their play.

I give the following extract from a letter written by Doctor Moore, the physical instructor:

In the fall when the school opens for the year, every boy who is physically able plays football until about the middle of November. There are perhaps a dozen boys who do not get into the game. The fact that a boy is small does not prevent him from playing in some team, for we have, aside from the first and second elevens and substitutes, two clubs, in each of which there are several teams so graded that all may play in one or another team.

From the end of the football season until the winter holidays, about a month, there is a time which we fill, as regards athletics, in various ways, but we try to have a little rest from the hard play of the football season before beginning the winter gymnastic exercises. So we organize games of association football and of basket ball out of doors; we have hare and hounds runs, or anything else that may suggest itself as being novel and desirable. So much for the fall term.

In the course of the winter term there is a tournament and an athletic meet in the gymnasium. Nearly all of the boys enter both of these events, which serve to relieve the monotony of the regular exercises.

In the spring term the time is given to baseball in about the same way as to football in the fall; but a few boys who are not good at baseball are allowed to row.

Another of these schools is the Jacob Tome Institute, at Port Deposit, Md. I give a few extracts from a letter on their work:

Each boy must engage regularly in some athletic game three afternoons a week during the fall and spring seasons, and the gymnasium is open for optional work until 5.30 o'clock every after noon during the winter term. We are aiming first of all for vital strength—i. e., strength of heart and lungs, the kind of strength that carries a man to a ripe old age. Next, we are striving to develop certain moral qualities, courage, force, resolution, and finally agility, grace, and symmetrical muscular development. All pupils who can not swim are taught in the pool; the others play baseball or practice the various events in track athletics.

Here is a part of a letter from Doctor Prentiss, the physical director of the Lawrenceville school:

We have nearly 400 acres of land. One hundred is given over to a nine-hole golf course. A professional teaches golf and cares for the links, giving all his time in spring and fall to it. He not only coaches the expert players of the school but teaches beginners also.

There are 32 clay-top tennis courts, and by payment of a small fee early in the fall a boy may reserve a place on any court for the school year. Last fall every place on each court was taken. There are eight baseball and football fields and one third-of-a-mile turf running track.

Within a few days from the opening of the fall term a boy must make a choice of one out-of-door sport, either golf, tennis, or football, and be actively engaged on the field from 4 to 5.15 p. m. four days a week. This schedule obtains from the beginning of the term up to Thanksgiving.

After Easter the outdoor schedule is resumed, the sports being golf, tennis, baseball, and the track. The proportion of electives last fall was: Golf 84, tennis 104, football 200. In the spring the proportions are about as follows: Golf 100, baseball 120, track 60, tennis 75.

Rowing is a feature at a number of these schools, and at St. Pauls cricket surpasses even football and baseball in popularity. Some of them, as Tome Institute, especially, are heavily endowed. They are situated usually in grounds of great natural beauty and some of them have buildings far surpassing those of the ordinary college. They represent the high-water mark in play and playgrounds in America, and one can scarcely imagine how conditions could be more ideal along these lines. There is ground enough for every boy to play at once and time enough for every boy to play. The belief of the masters is that he should play, and the rules of the school practically require that he shall play whether he is strong or weak, whether he is a star on the field or hopeless as material for an athlete. The coaching and companionship of the master is all that could be desired. Were it not for the one drawback of taking a young boy away from his parents for nine months of the year, these schools would be a boy's paradise.

I find nothing to indicate that football is a dangerous game for the small boys at these schools. This fact, together with the returns from the English preparatory schools, seems to show that the danger of football for small boys is due to the fact that boys are generally not taught the game, and injuries result from improper play, just as injuries result from turning boys loose in a gymnasium without an instructor.

Doctor Sargent, of Harvard, says there is great danger of a boy's injuring his heart by hard play at football before he is 18. He says a large number of the candidates for the team at Harvard are rejected on account of overtraining in preparatory schools. The extreme development of the competitive game is an unhealthy element in the American secondary school, especially of the public high school. The matches are too exciting and too great a diversion from school work.

They are apt to lead in academies to overtraining, and the fury of battle for the glory of the school is apt to lead to injuries. This is not as true of the schools of which I am writing.

Despite the high tuition fees charged at these schools, some of them have a long waiting list for admission. Men naturally desire to get their children out of the cities and away from the temptations of cities. They want them to have a first-hand acquaintance with nature and an opportunity to play in the open air. In general, these schools do not require quite as many hours of outdoor exercise as the English schools, but the athletic equipment is quite as good and perhaps better, and most of them have gymnasia, besides, which are far superior to those of the English schools. At the present rate of increase, we shall very soon have as many "public-school boys" in America as there are in the nine great public schools of England. In another generation, after tradition and story have had time to cluster around St. Pauls, and St. Marks, and Lawrenceville, and the others, they will perhaps come to fill such a place in American life and romance as Eton and Rugby do in England.

ATHLETICS IN COLLEGES AND UNIVERSITIES.

When we turn to the American university we find a unique condition of affairs. We find interest in and enthusiasm for athletics at fever heat; we find the successful athlete lionized in school and society; we find every seat at a great matched game taken long in advance and at very high prices, and many other phenomena indicating a general and intense interest in athletic contests; but, on the other hand, we find the number taking part in these contests to be very small indeed.

All athletics is new in America. Before 1870 there was neither football, baseball, nor rowing, as we know them now, in the American universities. The Rugby rules in football were borrowed from Canada by Harvard. The first intercollegiate games were played in 1876. From the time the game was first borrowed it has developed rapidly in tactics and form of play until now it gives certainly far greater opportunities for generalship and subtle combination of forces than any other game; and it is still developing. The training that it requires is exceedingly severe. The game of baseball in its present form has been a gradual development from the old English game of rounders. The National League of baseball clubs was organized in 1879.

Still, athletics plays a very subordinate part in physical training. In fact, it is scarcely considered a means of physical training. As an outgrowth of the new conception of the value of a sound body magnificent gymnasiums are springing up at all of our universities, often very nearly or quite the best of their buildings. Gymnastics has generally been made compulsory for the first two years of the college course. It is the training of the many; athletics is indulged

in only by the few, whom nature has already endowed with sinews of iron. Not over 2 or 3 per cent of the university men play football. Not more than 5 per cent, I should judge, play baseball. Probably less than 5 per cent play basket ball. However good or bad the training that these few may receive, it can not have much effect on the physical development of the university as a whole. To be sure, there are polo teams and golf teams and lacrosse teams, fencing teams, and track teams, etc., but the chances are that not more than 10 per cent of the men of any of our great universities would be found practicing on any one day.

The training for the crew and for football are both so severe that these so-called sports cease to be play and become serious business during the season of training. They are not carried on for the good of the individual, but for the glory of the school. The individual must sacrifice himself. He must eat at a special table; he must consider all that he eats or drinks and observe his every action to note its effect on his bodily condition. When he plays he must seek to win for the school at whatever risk to himself. Very many of them find themselves with overtrained bodies and undertrained heads at the end of the year. The case reminds one of the small boy who ate the pie that was intended for five other boys and himself. The athlete takes the training that some fifteen or twenty fellows should have received, and he has a little too much of it.

According to statistics for Yale and Harvard gathered by Dr. D. A. Sargent, it appears that each of these universities is yearly spending nearly $1,000 each on 100 men, who must already have been far above the normal standard and who did not require the training, whereas the average man, who really needed it, is having only about $4 a year spent on his physical education.[a]

There have been many assertions of late to the effect that the life of the athlete has been shortened by the excessive training which he receives during his college course. The statistics gathered by Doctor Meylan, of Harvard, and Doctor Anderson, of Yale, seem to show that the athletes of these universities are rather longer lived than the average person or the average student; but it must be remembered that these men are, as Doctor Anderson says, trebly selected. They must have been picked men in order to have reached college in the first place, and they are again the pick of the college men, so that normally much longer life might be expected from them than from others. On the other hand, there have been several recent studies which seem to show that the human organism is not adapted to such heavy, prolonged strains as those involved in 4-mile rowing, or in university football practice, and that both heart and lungs are weakened ultimately by the strain. The fact that a large portion of college

[a] Physical Education, by D. A. Sargent, Boston, Ginn & Co., 1906, page 88.

athletes die from heart or lung troubles seems to give some force to this theory.

There is a tendency to-day throughout our school systems to attempt to induce a larger proportion of students to participate in athletics, and to seek to reach at least some of those who need it. The University of Pennsylvania has groups of athletic events in which whole classes, or perhaps several classes at once, participate; and the University of Missouri is doing excellent work in securing the participation of a constantly increasing proportion of the students in this way.

I think it may be safely said that there is a wider interest in athletics in the colleges to-day than there has ever been before. Even Harvard's great stadium, with a seating capacity of 35,000, was not large enough to seat the crowds who wanted to see the latest Yale-Harvard football game. The papers are full of accounts of contests and matches and are giving an increasing amount of space to athletics.

There seems to be a very strong tendency to organize a university team for nearly every game that is played. Thus while everyone at Oxford and Cambridge plays football and cricket, a very small per cent play football or baseball at any American university. But besides these teams, there are teams in golf, hockey, water polo, lacrosse, basket ball, fencing, boxing, etc. Very notable have been the progress of basket ball into a game of the first order during the past few years and the increasing prominence that has been given to basket-ball games between the great eastern universities. This is a game which is in great favor in the girls' colleges, where it is generally played out of doors. Basket ball was invented by Doctor Naysmith and Doctor Gulick in conjunction, in 1891, and it is remarkable that we should hear of an international championship in basket ball in 1904. The game fills a great need because it is the only organized game other than the two newer games, indoor baseball and volley ball, that can be played within the limits of the gymnasium.

From the point of view of athletics the present tendency of students to forsake the small colleges for the great universities must be regarded with concern. The American college was built on the model of the English college, and the ideal of the English college was that it should be in the country. The present tendency is toward the shortening of the college course and the blending of the college and university courses. If this tendency goes on, there is danger that it will destroy the country college. It seems to me that the best stand these colleges can make is around their athletic fields. Athletics was the chief reason for putting the colleges in the country originally, and it seems to me a good reason for keeping them there now. But the social, moral, and hygienic values of games must be more fully realized, and the colleges must furnish opportunities for everyone to play if they are to make this a strong appeal for their preservation.

In general, then, we see that athletics is practiced by only a small proportion of American students. The main reliance is on gymnastics. In England everybody plays, but only a few take gymnastics. But England has an exceptional climate, which allows games to be played all the year round. Here it is too cold in winter and too warm in summer for games, so that we have only a short season of really suitable weather in the spring and in the fall.

It is thought that the American college can not afford an ample athletic field, but land is cheaper here than it is in England, and some of our institutions are richer. Would it cost our rural colleges much more to purchase a hundred-acre field than to build and equip a gymnasium?

In our colleges for women athletics holds an almost insignificant position. There is some tennis, basket ball, and golf. A few colleges have crews and hockey teams, but the proportion of girls taking part is small.

RECAPITULATION.

When the American school system is considered as a whole, one notices, first, the comparative absence of boarding schools, with their romantic life and ideal conditions for play; secondly, there is no attempt to furnish a campus large enough for all to play at once; thirdly, the match game is the rule; fourthly, only a small number of pupils play any athletic game regularly; fifthly, the boys receive very little coaching from their teachers; sixthly, for the most part the social, moral, and health values of games are not appreciated by either teachers or parents. Consequently, the boys receive little encouragement in their play from either of these sources. The general absence of coaching by the teachers results in less gentlemanly and morally less valuable play.

Towns and villages of England very often own a playground. The American villages very seldom do, and the townships never. In this I believe we are very great losers, for not only is the playground the most effective substitute for the saloon, but for a dozen other evils as well. On the sanitary side, the playground will do quite as much as the doctor for the health of the community; on the moral side, it is not certain that it will not sometimes do as much as the preacher.

America is really in very great need of a national game. We speak of baseball in this way, but in reality baseball is only a game for boys. Few men play after they leave school, and exceedingly few play regularly after they are 30. Practically none but students play football. It is unfortunate that we have not a splendid game like cricket that both men and women may play, and that a man may play until he is 50 or 60. It is one of our greatest national dangers that we have no healthful national amusement. The English have athletics, and the Germans have their social beer gardens, but

what have we? When we consider that it is in its amusements or pleasures that a nation always falls, we see how grave is the need of furnishing healthful forms of amusement for all of the people. This danger has not been felt so much in the past, because we have been too busy to spend much time in pleasure seeking; but we can not work forever at this high tension. Shortening the hours of labor and thus giving more hours of leisure to the laboring man is making this danger more grave every day. What will he do with his leisure? The educator must consider this, and not deem any system of education complete that does not give every student a love of some healthful recreation that he will pursue after he leaves school.

SOME IMPORTANT TITLES IN THE BIBLIOGRAPHY OF SCHOOL PLAYGROUNDS.

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CHAPTER XIV.

EDUCATION IN HAWAII, PORTO RICO, AND CUBA.

HAWAII.

1905–6.

The following extracts from the report of Mr. W. H. Babbitt, superintendent of public instruction of Hawaii, illustrate the condition of the schools of the islands, as far as a statistical report can do so, but such a report can not reflect the lively interest in the schools which is manifested by the community generally. To gain a true idea of this public sentiment residence in the islands is of course necessary, but a fair estimate of its strength can be obtained from the Hawaiian papers, which contain numerous articles on educational matters, notices of meetings, of school festivals, graduation exercises, letters from teachers and parents, and the like, the publication of which indicates a public interest in the schools emulating that of any community on the mainland.

The increase in attendance of the Japanese pupils, as shown in the tables, is significant.

Mr. Babbitt says:

In reviewing the educational work for the last year it is a pleasure to report considerable progress in spite of severe handicaps. The lack of suitable accommodations for children applying for admission and the insufficiency of funds appropriated for carrying on the work has operated against the greatest success and has made the administration of the schools a more trying task for both the department and the teachers than should be the case. The loyalty of all those in the employ of the department and the enthusiasm created by hope of better things have, however, more than offset the drawbacks, and the schools to-day are in a better condition than before. * * *

Manual training is being extended as much as possible, and the time is not far distant when each school properly equipped with tools should be in a position to do a large part of the repairing necessary from time to time. This will give the pupils a valuable training and save a very considerable outlay for the department. * * *

The need of an agricultural and industrial college is becoming more and more apparent. The fact that the vast majority of our students do not attend school beyond the required school age points to the necessity of fitting them as far as possible not alone for citizenship but for ability to properly maintain themselves in the struggle for existence. * * *

The attendance in the schools, both public and private, is constantly increasing.

The following table shows the enrollment by years since 1898:

	All schools.	Public schools.
JUNE.		
1898	14,997	10,965
1899	15,490	11,436
1900	15,537	11,501
1901	16,390	12,354
1902	17,518	12,958
1903	18,415	13,793
1904	19,299	14,467
1905	20,406	15,202
1906	21,358	16,119

Expenditure for 1906 ..... $361,458.99

Cost of instruction per capita in 1906 ..... 22.42

* * * During the past year the following teachers have been employed in all schools of the Territory:

	Public.	Private.	Total.
Hawaiian	71	16	87
Part Hawaiian	104	17	121
American	173	155	328
British	39	20	59
German	8	7	15
Portuguese	19	9	28
Scandinavian	11	2	13
Japanese		9	9
Chinese	5	9	14
Other foreigners	5	17	22
Total	435	261	696

1906–7.

[From the Report of the Governor of Hawaii.]

PUBLIC SCHOOLS.

The increased appropriations made by the last legislature for teachers' salaries, repair of school property, and erection of new buildings have done much to advance the work of the public schools. Increase in attendance at the public schools has been steady, and since 1904 has amounted to 2,671 pupils. During this time only 42 new teachers have been added, thus showing that for each new teacher there have been nearly 64 new children enrolled. This means that school buildings have been congested and teachers overworked.

School statistics of Hawaii, 1904 and 1907.

	1904.			1907.		
	Male.	Female.	Total.	Male.	Female.	Total.
Public schools:						
Schools			147			153
Teachers	107	292	399	95	346	441
Pupils	7,947	6,520	14,467	9,430	7,708	17,138
Private schools:						
Schools			57			58
Teachers	82	165	247	91	171	262
Pupils	2,510	2,322	4,832	2,891	2,429	5,320

Value of school property (exclusive of movable property and school lands): 1904, $343,400; 1907, $768,502; increase in three years, $425,102.

The Territory spent for school purposes, aside from moneys appropriated from the loan fund, the following amounts:

Expenditures for school purposes.

1903–4	$409,048.84
1904–5	336,358.59
1905–6	361,458.99
1906–7	349,933.14

The amounts spent, however, have not kept a proportionate pace with the increase in attendance, as shown by the cost of instruction per capita, which, in 1904, was $28.27; in 1905, $22.12; in 1906, $22.42; and in 1907, $20.41.

Industrial work has been emphasized and interest aroused and sustained. Last year, out of 7,708 girls in the schools, 7,425 were instructed in sewing and one-half of the pupils enrolled were engaged in agricultural work of some sort. It is hoped during the next year to establish cooking departments in several of the schools. Wherever possible, schools will be equipped with tools, and all minor repairs on buildings and fences will be made by pupils under the direction of the teachers. Elementary instruction in manual work will be given. The following table shows the number of pupils taking the different manual courses in the public schools:

Industrial work in public schools.

Sewing	7,425	Other manual training	4,628
Knife work	344	Singing tonic-sol-fa	12,383
Agriculture	8,262	Other singing	8,864
Lauhala and bamboo work	280	Drawing	13,475

The standard of instruction has been raised and certificated teachers are being placed in positions formerly held by uncertificated teachers. In the last printed report of this Department it was shown that on one island 36 per cent of the teachers were uncertificated. Such a condition should never again exist.

As will be seen from the following table, the number of children attending the lower grades is overwhelmingly large. The opportunity for higher study here, without the great expense involved in going abroad, should induce many of our children to take the courses offered.

Pupils in public schools according to grade.

Receiving grade	5,679	Grade VII	204
Grade I	3,623	Grade VIII	125
Grade II	2,663	Normal	110
Grade III	2,164	High school	160
Grade IV	1,359		
Grade V	657	Total	17,138
Grade VI	394		

Nationality of pupils in schools.

Nationality.	Public.		Private.		Total.	
	1906.	1907.	1906.	1907.	1906.	1907.
Hawaiian	4,045	3,930	800	991	4,845	4,921
Part Hawaiian	2,382	2,462	1,040	931	3,422	3,393
American	457	423	502	557	959	980
British	142	96	81	103	223	199
German	144	147	119	118	263	265
Portuguese	3,239	3,257	1,233	1,042	4,472	4,299
Scandinavian	63	49	38	21	101	70
Japanese	3,578	4,236	719	730	4,297	4,966
Chinese	1,489	1,667	603	678	2,092	2,345
Porto Rican	338	317			338	317
Korean		149		4		153
Other foreigners	202	405	104	145	346	550
Total	16,119	17,138	5,239	5,320	21,358	22,458

Percentage of nationalities in schools, 1907.

Nationality.	Percentage of total attendance.			Percentage of public school attendance.	Increase.		Decrease.	
	Public schools.	Private schools.	All schools.		Number.	Percentage of total increase.	Number.	Percentage of total decrease.
Hawaiian	17.50	4.41	21.91	22.93	.....	.....	115	50.00
Part Hawaiian	10.96	4.15	15.11	14.36	80	6.46	.....	.....
American	1.88	2.49	4.37	2.47	.....	.....	34	14.78
British	.43	.46	.89	.56	.....	.....	46	20.00
German	.66	.53	1.19	.86	3	.24	.....	.....
Portuguese	14.50	4.64	19.14	19.00	18	1.43	.....	.....
Scandinavian	.22	.09	.31	.29	.....	.....	14	6.09
Japanese	18.86	3.25	22.11	24.72	658	52.67	.....	.....
Chinese	7.43	3.02	10.45	9.73	178	14.24	.....	.....
Porto Rican	1.37	.....	1.37	1.85	.....	.....	21	9.13
Korean	.66	.02	.68	.87	149	11.92	.....	.....
Other foreigners	1.81	.66	2.47	2.36	163	13.04	.....	.....
Total	.....	.....	100.00	100.00	1,249	100.00	230	100.00

COLLEGE OF AGRICULTURE AND MECHANIC ARTS.

By act 24 of the legislative session of 1907 was established the College of Agriculture and Mechanic Arts of the Territory of Hawaii. The college is under the control of a board of five regents, appointed by the governor for the term of four years, with the exception of the first incumbents. The purposes of the college, as set forth in the act creating it, are—

"To give thorough instruction in agriculture, mechanic arts, and the natural sciences connected therewith, and such instruction in other branches of advanced learning as the board of regents may from time to time prescribe, and to give such military instruction as the Federal Government may require. The standard of instruction in each course shall be equal to that given and required by similar colleges on the mainland, and upon the successful completion of the prescribed course the board of regents are authorized to confer a corresponding degree upon all students who shall become entitled thereto."

The legislature appropriated, from the loan fund, $10,000 for the erection of buildings, purchase of apparatus, fixtures, etc., and $15,000 from the general revenues of the Territory, $10,000 of which is to be for salaries and $5,000 for general expenses.

The board of regents has been appointed and the task of selecting a site and putting the institution in working order is already under way. Much interest has been manifested by the community in the college, and it is hoped that many good results will flow from it. With the aid that this institution should receive from the Federal Government, under its munificent system of endowing agricultural colleges, a most thorough system of practical instruction can be built up, the equal of any that obtains in our sister Territories. This being a subtropical country, the problems that will be presented here will be unique, and their working out will be watched with much interest.

PUBLIC LIBRARY.

The legislative session of 1907 laid the foundation for a public library, the Territory at present having no library of an entirely public nature. The Territory owns many books, gathered during the time of the various governments that have existed here, which can be used as the basis for the establishment of a good public library. Isolated as this community is, the need for such an institution, with branches scattered throughout the Territory if possible, is at once apparent, particularly in its relation to the school children of the community. The act of the legislature establishing the library aims to meet this want, and for the first two years an appropriation of $10,000 has been made for the support and maintenance of the library.

PORTO RICO.

[Abstract of the Report for 1907 of the Commissioner of Education for Porto Rico.]

The report of the commissioner, Dr. Roland P. Falkner,[a] shows commendable progress in the schools of the island. This has been due in large part to a fixed administrative service, there having been during the past year no changes of moment in the personnel of the department. The work of the several divisions has been closely coordinated along lines detailed more fully in the report for 1906.

The fundamental school law of Porto Rico was passed in the year 1904. Its essential provisions have not yet been modified, though in details improvements have been made by successive legislatures. The legislation of 1907 calls for special notice from its rounding off certain phases of the general law and introducing new features. One of its beneficial results has been the establishing in definite terms of the right of the local school boards to hold real property, and the transferring to such boards of the schoolhouses erected by the insular government throughout the island. Under existing law the local school boards are required to pay a monthly allowance to the teachers, which is designated as house rent. It is, in fact, part of the regular compensation of the school teachers, its amount being fixed by law, and the fact of its being paid by the boards is the apparent justification of the election of teachers by local boards. It has been an anomaly of the law previously existing that certain teachers were appointed directly by the department of education without intervention of the school board, who were entitled to receive the monthly allowance of house rent from the board. By recent law this anomaly has been removed.

As high schools are established in only three cities of the island of Porto Rico, the benefit of secondary education was not enjoyed by many of the residents of the other towns and villages, who are unable to bear the expense of boarding in these cities. This disadvantage of the smaller community lies in the nature of the case. One step toward removing it was taken by the legislature in establishing fifty scholarships in high schools, to be distributed among the towns of the island. Such scholarships carry with them a small monthly payment which is deemed adequate to pay the subsistence of pupils from other places.

In addition to making more liberal provision for the fiscal year 1907–8 and simplifying and improving the form of the appropriation act, the legislature made an appropriation of $80,000 for the construction of school buildings. The plan for the expenditure of this

[a] Resigned August 1, 1907

is that the buildings shall be erected by the insular government under contract with the several school boards, the latter agreeing to repay within a period, which may not exceed ten years, one-half the cost of erecting the buildings. Such payments when made, together with interest upon the advances made to the several school boards, will be repaid into the fund, which it is hoped will also receive additions by subsequent legislative enactment. The demand for modern school buildings is general throughout the island. The funds heretofore available for school construction being practically exhausted, the creation of this new fund is of the highest importance and insures the continuance of a fruitful and beneficial activity.

Efforts to extend the school system met with the usual difficulty in inadequate supply of duly certified teachers. The preparatory teachers, of whom about 75 were employed, have met the need in part. Experience with them has been quite satisfactory, and shows that this class may be looked to as a regular source of supply for rural teachers. The legal restrictions upon the employment of such teachers have been an unnecessary burden and should be removed.

Every effort has been made to increase the number of teachers, so far as this could be done without lowering the standards. Good results followed a plan of giving credit for work successfully done in examinations where candidates failed to meet all requirements, and also by combining, in June, 1907, examinations for eighth-grade diplomas with those for rural licenses. The ranks of graded teachers are being filled up year by year in a very satisfactory way through the graduates of the normal school. Such graduates are in many instances preferred to older teachers, and have little difficulty in securing employment. Through the injection of this new element into the teaching force there can be no doubt that the general level of efficiency is being raised.

A marked feature of the school work in the past year was the progress made in the English language. It now appears that the day is not far distant when the graded schools throughout the island will be taught exclusively in the English language. This gratifying result has been obtained through the efforts of the Porto Rican teachers, who are rapidly qualifying themselves to teach the English language. They are to some extent under the guidance and supervision of the American teachers, but the number of classes taught by the American teachers has not appreciably increased. There were last year 389 of the graded schools taught in the English language, whereas the year before the number was only 160. Throughout the island there are very few grades, except the first, which are wholly without training in English.

An improved local administration is noted throughout the island. The school boards, which were formerly loaded with debt, are now

practically free from such obligations, and are meeting their current expenses in a very satisfactory way. This result has been reached through the careful system of audit which has been adopted by the department, aided by the general financial improvement of the municipalities.

Agencies designed to promote the professional progress of teachers are systematic instruction in the English language given by the American teachers, annual institutes, and summer schools. They have been followed with great interest by all the teachers of the island.

A number of excellent buildings have been provided for schools in different parts of the island. In some of the towns the buildings have been constructed entirely by the department of education, while in others the local school boards have borne a part of the expense; in still others the local boards have paid for the buildings entirely from their own funds. The significance of the year in this connection lies rather in its promise than in its achievement. Not only is the $80,000 fund already noted available for school buildings, but the two towns of Ponce and San Juan have contracted considerable loans from the insular government for that purpose. Ponce with its loan of $50,000 proposes to erect buildings to accommodate all the graded schools of the city. San Juan with a loan of $48,000 contemplates the construction of a large 20-room building on the Plaza Colon. The technical force of the department is unable to cope with this extensive building programme. With the approval of the governor, Mr. E. B. Homer, of the architectural firm of Clark, Howe & Homer, of Providence, R. I., visited the island, and will make the plans for the new buildings, leaving specifications and supervision to the department of school buildings. It is hoped by this arrangement to secure a somewhat higher grade of architectural excellence than has heretofore been possible.

Note is made in the report of the exhibit of the department at the Jamestown Exposition, the main features of which were the display of photographs of school buildings, ancient and modern, charts, and specimens illustrating the progress of English work and the products of the mechanical school.

The number of pupils enrolled shows an increase over the previous year. The attendance of the pupils shows also very considerable improvement. Attention has been called to the economic loss through repeating grades, and it is gratifying to note that the record of promotions at the close of the year 1907 is much better than in the previous year.

The statistical details of the report are very comprehensive and can not be summarized here. The following is a statement of the children in school on the island of Porto Rico March 1, 1907:

Summary of statistics.

Type of school.	Number.	Pupils enrolled.
Graded schools	528	22,870
Rural schools	623	28,934
Total common schools	1,151	51,804
School of practical agriculture	1	26
Industrial schools	3	231
High schools	3	155
Normal school	1	123
Total public day schools	1,159	52,339
Night schools	74	2,646
Total public schools	1,233	54,985
Private schools	184	5,302
Total schools	1,417	60,287

Estimated value of all insular school buildings [a]	$519,027
Rental value of other buildings	60,049
Total number of different teachers employed in the common schools at the end of the year:	
White—	
Males	580
Females	51
Total	631
Colored—	
Males	465
Females	40
Total	505
White and colored—	
Males	630
Females	506
Total	1,136
Total number of different teachers employed in special schools at the end of the year	39
Total number of different teachers employed in all schools at end of the year	1,175
Monthly salaries of teachers as fixed by law during the year 1906–7 have been as follows: [b]	
Rural teachers—	
Second class	$35
Third class	30

[a] Including entire expenditure made by the insular government under direction of the department of education, in connection with the acquisition of property and with the erection of school buildings, since the establishment of civil government.

[b] Special teachers as per special contract.

Monthly salaries of teachers as fixed by law, etc.—Continued.	
Graded teachers and teachers of English—	
First class	$55
Second class	50
Third class	45
Principal teachers—	
Second class	75
Third class	70
To all of which amounts are added allowances for house rent as follows:	
Rural teachers, not less than $3 nor more than	8
Graded, principal, and special-work teachers, not less than $10 nor more than	15
Total expenditure for school purposes, 1906–7:	
By insular government	650,935
By local government	257,859
Total	908,794

This shows an increase of nearly 4,000 pupils over the figures of the preceding year. The interest of the people in educational matters is evidenced by the considerable number of children who are sent from Porto Rico to the United States to receive an education. An inquiry made through the local school officers revealed the names of 492 persons studying in the States, of whom 141 were in colleges and universities and others in secondary and primary schools. The general situation of the schools is encouraging and the outlook for the future is bright.

CUBA.

The following note on education in Cuba is mainly taken from the annual report for 1907 of the provisional governor of the island, Hon. Charles E. Magoon, and is of some special historical interest because of the interruption of the schools by the insurrection or armed disturbance of August, 1906, which was followed by the American intervention.

The statistics of primary instruction, however, are taken from "La Instrucción Primaria," an official publication prepared under the direction of the secretary of public instruction of the islands, and they give the situation for 1907.

The department of public instruction is divided into two sections, primary instruction and superior instruction, the latter subdivided into two departments, the institutes and the national university. The State also supports, in connection with its section of superior instruction, the school of arts and trades, the school of painting and sculpture, and the national library.

The armed movement of August, 1906, produced dire results in the school attendance. Except in a few important cities the attendance dwindled to insignificant proportions, and in the rural districts of

Pinar del Rio and Santa Clara provinces it practically ceased. The department spared no effort to remedy the situation. Special school inspectors were appointed and the necessary school material furnished, and by December 1 the school attendance was raised to its former standard; since then the attendance has been up to the average.

The most important steps in connection with the public schools have been the movement toward the grading of the schools in a pedagogic and scientific manner, the increase in the number of special branches taught, and the wider scope given to those which already existed in the schools of Cuba. In the school term of 1905–6 the following special branches were taught: Kindergarten, sloyd in wood, and physical training. During the past year the following special branches have been added: Lace work, sewing and pattern work, drawing and modeling, sloyd in cardboard, sloyd in metal, and music.

The normal education of teachers is receiving serious attention, and an elaborate plan for high schools has been matured by the board of superintendents.

The principal institutes, one in each province, prepare their pupils for the degree of bachelor. The professors, by virtue of the law of July 11, 1906, have had their salaries increased, special appropriations have been made for the purchase of scientific material, and examination methods have been rendered less cumbersome and complicated for both professors and scholars. The state contributed the sum of $268,860 for the maintenance of the six provincial institutes during the past year.

The national university received $357,358 from the state. It is divided into three faculties—Belles-lettres and sciences, medicine and pharmacy, and law. At the request of the university some changes have been effected in its course of studies, in the division of its faculties, and in the degrees which it confers. Among the most important may be mentioned the division of the faculties of science, the amplification of the school of agronomy, the right to confer the degree of doctor of dental surgery, the installation of a department of X and Finsen rays and a clinic at the "Mercedes" hospital, and the construction of new and spacious buildings on the university grounds. The salaries of all the professors have been increased in compliance with the law passed by the Cuban Congress on July 11, 1906.

The School of Arts (manual) and Trades, which the military government of intervention raised to a high degree of excellence, has been amply provided for. An appropriation of $41,000 has been made for this institution, which provides both day and night instruction, and turns out skilled workmen and artisans.

The state contributes $16,060 toward the School of Painting and Sculpture, at which over 500 pupils are enrolled this year. Among

the changes introduced has been the appointment of a woman teacher for the female pupils in the class of anatomy and drawing from the living model.

The national library was founded by General Wood. Its personnel has recently been reorganized and increased, and to-day its shelves contain over 40,000 books. The state annually contributes $11,660 toward its support.

At the end of the first trimester of 1907 (March) there were 3,774 teachers employed in the public primary schools of the island, divided as follows:

White:	
Men	1,246
Women	2,297
Total	3,543
Colored:	
Men	55
Women	176
Total	231
Men	1,301
Women	2,473
Total	3,774

At the same time the enrollment was:

White	86,560
Colored	42,306
Boys	69,563
Girls	59,303
Total	128,866

The attendance was 97,987, or 76.07 per cent of the enrollment.

At the same period the enrollment and attendance at the private schools were as follows:

White	10,590
Colored	2,456
Boys	6,486
Girls	6,560
Total	13,046

The attendance was 11,097, or 85.06 per cent of the enrollment.

Thus the total enrollment was 141,912 in a population of 2,000,000 in round numbers.

CHAPTER XV.

REPORT ON THE ALASKA SCHOOL SERVICE AND ON THE ALASKA REINDEER SERVICE.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION, ALASKA DIVISION,
Washington, D. C., June 30, 1907.

SIR: I have the honor to submit the annual report of the work of the Alaska Division of the Bureau of Education for the fiscal year ending June 30, 1907.

In view of the reorganization and extension of the Alaska School Service and of the Alaska Reindeer Service I deem it advisable to first review the history of their development to the present time.

Early in the history of Russian America schools were established in some of the settlements along the shores of the North Pacific Ocean. In the wake of Bering's ill-fated expedition of discovery had come hundreds of Russian adventurers, eager to gather the harvest of furs in the newly discovered land. As a result of the relations between the pioneer fur trader and the native races inhabiting the Aleutian Islands and the shores to the eastward the number of children of mixed blood gradually increased until the need for the establishing of schools became apparent. The first of these schools was established at the trading post of St. Paul, on Kodiak Island, in 1784, by Gregory Shelikof, the founder of the Shelikof Company.

In 1799 the Russian-American Fur Company was founded under Imperial charter and became Russia's agent for the government of its outlying province. By the terms of its charter the Russian-American company was required to establish schools in connection with its trading posts, and under its administration primary schools were maintained at various stations, usually under the supervision of the local trader or agent, in which a few children were in attendance during the winter season.

As the company grew in wealth and influence some of these schools gradually assumed a more pretentious character, the school at Sitka becoming the educational center. Separated as the Russian trading posts were from each other and from their base of supplies in Kamchatka by hundreds of miles of tempestuous sea, it was important

that means of communication should be satisfactorily maintained. Accordingly, in Sitka for many years the more promising young men received special training in navigation, shipbuilding, and in the mechanic arts under a corps of competent teachers, usually selected from the Russian naval officers assigned to that station. However, after completing the course of instruction the young men were compelled to remain in the service of the Russian company for a period of fifteen years. In this way the Russian-American company secured competent masters for its vessels, mechanics, and bookkeepers thoroughly trained and firmly bound to its interests. Half-breed girls were also, in limited numbers, trained as housekeepers, and frequently married the minor employees of the company, who thus became more strongly united to the colony.

The Russian-American company for the most part confined its training to persons whom it intended to use in its service, and did not extend education to the masses of the native population. Nor did the few schools maintained in connection with the missions of the Russo-Greek Church reach the native population to any extent, their object being the training of half-breed and native priests.

Some years prior to the transfer of the country to the United States the Russian-American company discontinued its schools, under the pressure of increasing expenses and diminishing income.

From 1867 until 1884 Alaska was unprovided with any form of government whatsoever. This vast territory was left without any laws by which life or property could be protected and without schools.

In 1877 the Presbyterian Board of Home Missions, through its agent, Dr. Sheldon Jackson, commenced the establishing of its missions in Alaska, schools being maintained in connection with several of its stations. On various occasions the commanding officers of United States naval vessels in Alaskan waters rendered assistance to these schools. In 1881, Capt. Henry Glass, commanding the U. S. S. *Jamestown*, in addition to establishing sanitary conditions in the native village of Sitka, enforced compulsory attendance at the Sitka mission school by imposing fines upon the delinquent parents.

During the seventeen years prior to 1884 attention was repeatedly drawn to the educational needs of the native tribes in Alaska by Presidential messages, by annual reports of the Commissioner of Education, by resolutions of the National Education Association, and by hundreds of memorials and petitions from various sections of the country. In his report for 1872 the Hon. John Eaton, Commissioner of Education, made the following statement: "Alaska lies entirely outside of all organized efforts for education, and presents the singular fact of being an integral part of the boasted most progressive nation in the world, and yet without the least possible provision to save its children from growing up in the grossest ignorance and barbarism."

As the result of continued pressure Congress finally passed an act providing a civil government for Alaska, which received the approval of President Arthur on May 17, 1884. Section 13 of this act devolved upon the Secretary of the Interior the duty of making provision for the education of children in Alaska, without reference to race, in the following terms:

SEC. 13. That the Secretary of the Interior shall make needful and proper provision for the education of the children of school age in the Territory of Alaska, without reference to race, until such time as permanent provision shall be made for the same, and the sum of twenty-five thousand dollars, or so much thereof as may be necessary, is hereby appropriated for this purpose.

On March 2, 1885, the Hon. Henry M. Teller, Secretary of the Interior, assigned to the Commissioner of Education the work of carrying into effect the purpose of Congress.

The inaugurating of a system of schools for the Territory of Alaska was a work of great magnitude, beset with many difficulties. Schools were to be established in a territory equal in area to one-fifth of the United States, icebound and inaccessible during eight months of the year, with the exception of a narrow strip of its southern coast. In this vast region the only points of civilization were a few small trading settlements, hundreds of miles apart, scattered along its shores; and the only available means of communication a small steamer making monthly trips between Puget Sound and southeastern Alaska. The schools would be from 4,000 to 6,000 miles from Washington, for the most part among a primitive native population living in the grossest barbarism.

It was essential that at the outset a reliable man, familiar with the conditions prevailing in Alaska, should be given the personal charge and supervision of this difficult and important work. The Hon. John Eaton, at that time Commissioner of Education, accordingly selected the Rev. Sheldon Jackson, D. D., who had for many years been engaged in missionary work along those coasts, and with the approval of the Secretary of the Interior he was appointed general agent of education for Alaska, April 11, 1885.

The establishing of United States public schools in southeastern Alaska was comparatively easy. In this section of Alaska the Presbyterian Church had maintained a few schools in connection with its mission stations. These schools were now assumed by the Bureau of Education.

The policy at that time pursued by the Indian Office of making contracts with the missionary societies for the instruction and maintenance of the children in the vicinity of their stations, thus sharing the expense with the missionary societies was early adopted. By this plan the Bureau of Education was enabled to extend the school system in Alaska more rapidly and more economically than would have been

possible if it had depended solely upon its small Congressional appropriations.

In 1884 a contract was entered into with the authorities of the Moravian Church for the establishing of a school among the Eskimo on the Kuskokwim River, which was carried into effect in 1885.

In 1886 it was deemed important to extend the school service westward along the shores of the North Pacific Ocean and to the Aleutian Islands. There being no regular means of communication with western Alaska, the Bureau of Education chartered a schooner upon which the general agent transported the teachers, building materials, and supplies for those western schools.

In 1886 the school service was also extended into the valleys of the Yukon and Nushagak rivers by contract made with the Protestant Episcopal, Catholic, and Moravian missionary societies.

The growth of the school system throughout the Territory seemed to render a systematic organization and a distribution of responsibility necessary; accordingly the Secretary of the Interior, June 15, 1887, approved a code of rules and regulations for the conduct of schools in the district of Alaska. This code created a Territorial board of education, consisting of the governor, the United States judge, and the general agent of education, all resident at Sitka. Acknowledgment is due to the Territorial board for its watchfulness over the educational interests of the district; but, from the widely scattered locations of the schools and the fact that many of the teachers could communicate more frequently and more directly with the Bureau of Education in Washington than with Sitka, it was deemed advisable to establish local school committees in the various settlements in lieu of one central board. Accordingly, by a revision of the rules, approved by the Secretary of the Interior April 9, 1890, the Territorial board was discontinued from and after June 30 and the organization of local school committees serving without compensation was authorized. By the same revision of the rules positions of assistant agent of education in Alaska and of superintendent of schools in the Sitka district were created. Mr. William Hamilton, of Pennsylvania, was appointed to the former position and Mr. James Sheakley, of Alaska, to the latter. In 1892 Mr. Sheakley was succeeded by Mr. William A. Kelly. In 1903 the local school committees were discontinued, experience having shown that supervision of the schools could be maintained more effectively by the district superintendent of schools.

In 1890, through the courtesy of the Secretary of the Treasury, permission was granted to Doctor Jackson to accompany the U. S. S. *Bear* on its annual cruise in Bering Sea and the Arctic Ocean and thus extend the school system into Arctic Alaska. During the previous winter contracts had been entered into with the American Missionary Association for the establishing of a school at Cape

Prince of Wales, on Bering Strait, with the Protestant Episcopal Church for a school at Point Hope, and with the Presbyterian Board of Home Missions for a school at Point Barrow, the northernmost settlement on the continent. During the few weeks of open navigation in midsummer in 1890 supplies and building materials for the schools at these remotest points were landed, and within a few months these schools were in successful operation.

Upon his return from his visit to Arctic Alaska in 1890 Doctor Jackson urged upon the attention of the Commissioner of Education the fact that the Eskimos inhabiting the shores of the Arctic Ocean and Bering Sea were to a great extent in a starving condition and recommended that steps be taken to import into Alaska domestic reindeer from Siberia, and to introduce reindeer herding as an industry in connection with the schools in northern Alaska. In the following winter the first steps were taken to carry these recommendations into effect.

In 1893 the action of Congress with regard to the Office of Indian Affairs in the matter of contract schools was taken as indicating a policy to withdraw appropriations from contract schools, and for that reason the amount paid to contract schools by the Bureau of Education in that year was reduced from $28,980 to $17,040; in 1894 it was further reduced to $8,000, and in 1895 the subsidizing of contract schools in Alaska was entirely discontinued.

At the inauguration of the Alaska School Service in 1884 the Commissioner of Education was charged with the duty of providing schools for children in Alaska, without reference to race, and in carrying out this duty schools were established for white children as well as for native children throughout Alaska. The influx of white men into Alaska, as a result of the widespread discovery of gold, and the increasing number of white children in the Territory gradually strengthened the desire on the part of the white settlers for local control of their schools. Taking cognizance of this desire, Congress in "An act making further provision for civil government in Alaska," approved June 6, 1900, provided for the incorporation of towns in which the schools should be under local control and supported by 50 per cent of the license moneys collected within their corporate limits. By this legislation the Bureau of Education was gradually relieved of the care of schools for white children in the larger settlements.

From the founding of the Alaska School Service in 1885 the means for its support had been granted by Congress in annual appropriations in the sundry civil bill. In lieu of this an amendment to the "Act making further provisions for a civil government for Alaska," approved March 3, 1901, provided that 50 per cent of all license moneys paid for business carried on outside of incorporated towns in Alaska should be expended for the support of the schools outside of the

incorporated towns. The schools under the Bureau of Education continued to derive their support in this manner until 1905, when by the terms of an "Act to provide for the construction and maintenance of roads, the establishment and maintenance of schools, and the care and support of insane persons in the district of Alaska, and for other purposes," approved January 27, 1905, the management of the schools for white children outside of incorporated towns devolved upon the governor of Alaska as ex officio superintendent of public instruction in said district, while the education of the native races of Alaska remained under the direction of the Secretary of the Interior, to be provided for by an annual Congressional appropriation.

The following diagram shows the growth and character of the schools maintained in Alaska by the Bureau of Education in each year from the time of the establishment of the Alaska School Service to the present time:

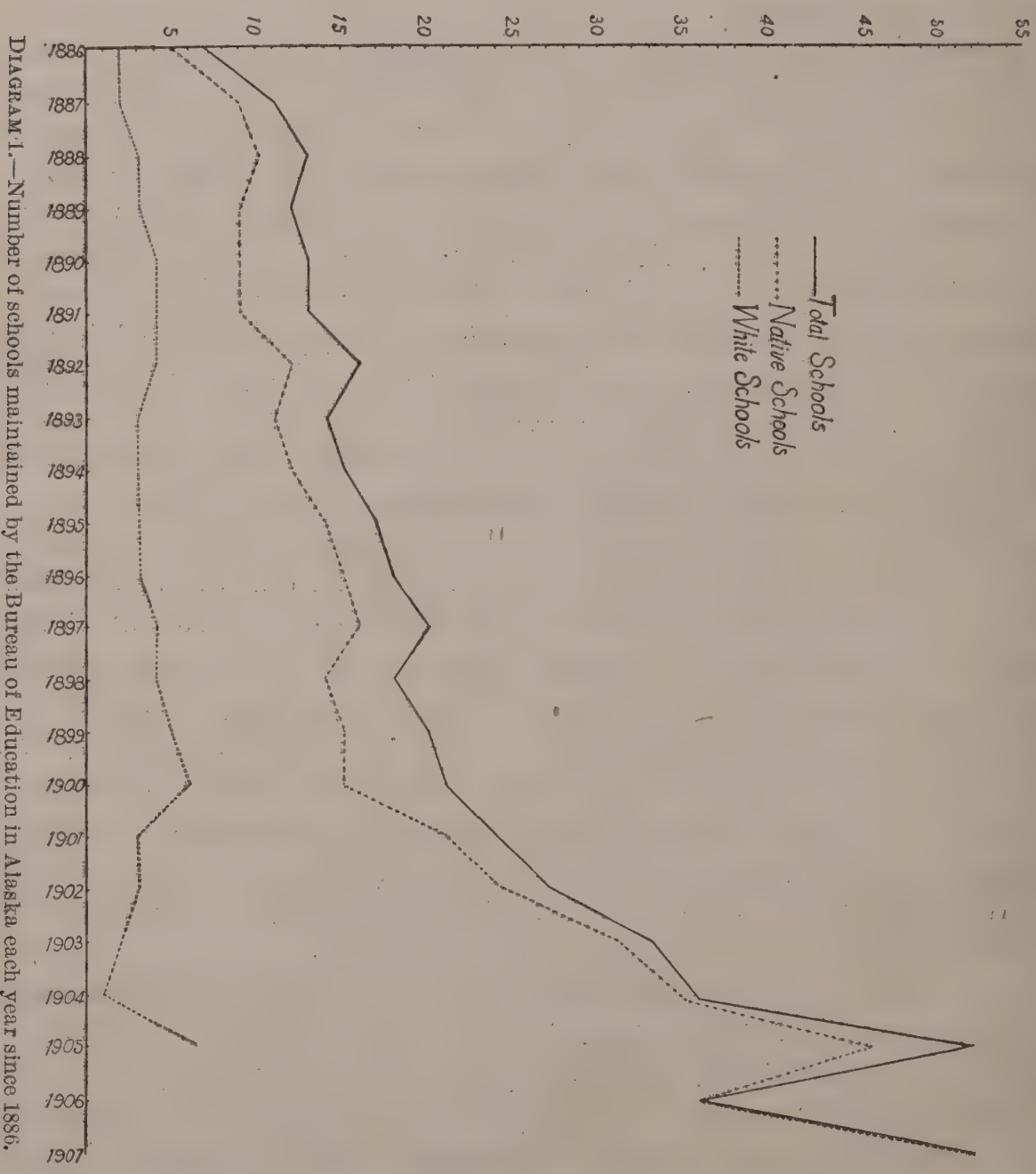

DIAGRAM 1.—Number of schools maintained by the Bureau of Education in Alaska each year since 1886.

Ever since the establishment of the Alaska School Service instruction in various industries and in agriculture has been given from time to time in those schools throughout Alaska which have been in charge of teachers competent to give such instruction. Training in agriculture met with especially satisfactory results when introduced in connection with the work of the school for white children in Sitka. For five years in succession an agricultural fair was held, at which the vegetables and flowers grown by the pupils were exhibited. Alaskan boys take naturally to the use of tools and machinery. Practical training in carpentry has been given to the Eskimos in connection with the erection of school buildings throughout Alaska. The school buildings on the shores of Bering Sea and the Arctic Ocean were erected by natives under the direction of white carpenters. In Sitka and in other places in southeast Alaska the unsightly native huts have been replaced by neat frame buildings erected exclusively by native carpenters. Skill in boat building is shown by the natives in every section of Alaska, their boats being models of symmetry. At Sitka and at Unalakleet, where instruction has been given to the natives in building boats upon the models used by white men, natives have met with equal success in the construction of these boats. At Unalakleet there are seven or eight small schooners, built, manned, and managed entirely by Eskimos. In many instances Alaskan natives have shown themselves competent to run launches and to operate the machinery in sawmills, mines, and canneries. Cooking, sewing, dressmaking, and basketry have been taught to the native girls in several of the schools. The plans for the extension of the Alaska School Service include the systematizing and extension of the industrial training of the natives so as to include all of the industries adapted to the various sections of Alaska.

One of the most pressing needs of the native population in Alaska is the obtaining of medical treatment free of charge. Cases of tuberculosis and pneumonia appear among the natives in all sections of Alaska; epidemics of smallpox, measles, and diphtheria are of frequent occurrence; insanitary conditions prevail in every native village. In order to furnish medical relief, the Bureau of Education has always attempted to send as teachers of its schools in the remoter villages men possessing medical knowledge. During the fiscal year 1906–7 the Bureau of Education extended its efforts to give medical aid to the natives by furnishing medical supplies and medical text-books to the teachers of eleven of its schools in villages not hitherto reached with medical aid.

In many Alaskan villages there are crippled, aged, and diseased natives who are unable to provide food for themselves and thus become charges upon the communities in which they live. In order to relieve such cases of destitution part of the annual appropriation

was tentatively set aside as an emergency relief fund. With the approval of the Secretary of War, this relief was extended through the commanding officers of the military posts in Alaska.

The present chief of the Alaska Division entered upon the duties of that office May 1, 1907, and during the summer he made the annual inspection of the schools and reindeer stations on the shores of Bering Sea and the Arctic Ocean.

In May, 1907, the limits of the two districts of Alaska were fixed as follows: The northern district comprising the regions drained by the rivers emptying into the Arctic Ocean, Bering Sea, and Bristol Bay, together with St. Lawrence Island, Little Diomede Island, and the Alaska peninsula, as far east as the one hundred and fifty-second meridian; the southern district comprising the region of Alaska bordering on the North Pacific Ocean east of the one hundred and fifty-second meridian, and including the interior regions of Alaska drained by the rivers emptying into the North Pacific Ocean east of the one hundred and fifty-second meridian, together with Afognak Island, Kodiak Island, and the Aleutian Islands. As thus defined, the northern district, which includes all that part of Alaska affected by the reindeer enterprise, was placed under the superintendency of Mr. William T. Lopp. Mr. William A. Kelly was reappointed superintendent of the southern district. Mr. Axel E. Karlson was relieved of the superintendency of the schools and reindeer stations at Unalakleet, Golofnin, and Koserefsky, which were included in the northern district.

During the fiscal year 1906–7 school buildings, the erection of which had previously been authorized from the income derived from the 50 per cent of license fees collected outside incorporated towns in Alaska, were in process of erection at Icy Cape, Point Hope, Teller, Tanana, and Golofnin, all of which were completed before the close of the year, with the exception of the building at Golofnin.

The appropriation for the education of natives of Alaska during the fiscal year 1908 is $200,000; of this amount $100,000, to be used in establishing additional day schools, became available March 4, 1907. Under this provision for additional day schools, Mr. W. T. Lopp was authorized to supervise the erection of school buildings on Little Diomede Island, in Bering Strait, and at Kobuk village, on the Kobuk River, about 300 miles from its mouth; Mr. Franklin Moses, formerly teacher of the public school at St. Michael, Alaska, was authorized to supervise the erection of school buildings at Stevens Camp, Rampart, and Kokrines, on the Yukon River, and at Nenana on the Tanana River. From the appropriation "Education of Natives of Alaska, 1907," the erection of school buildings at Igloo and Sinuk, in northern Alaska, was also undertaken under the supervision of Mr. W. T. Lopp.

TABLE 1.—*Cost, character, and dimensions of United States public school buildings for natives of Alaska.*

Location.	Cost.	Character.	Dimensions (feet).	Date of final payment.	Fund from which paid.
Afognak	$2,505.00	Frame, 1-story	46×20	Dec. 6,1890	Education in Alaska, 1888–89.
Barrow	6,571.29	Frame, 1½-story	75×30	Nov. 4,1904	License fund.
Bettles	3,114.82	Log, 2-story	32×20	Feb. 24,1905	Do.
Copper Center	5,558.20	Log, 1-story	32×16	Mar. 17,1906	Do.
Council	275.00	Frame, 2-story	24×18		Education in Alaska, 1906–7.
Deering	4,902.36	Frame, 1½-story	75×30	Dec. 12,1905	License fund.
Diomede	(a)	do			Education in Alaska, 1907–8.
Douglas	1,200.00	Frame, 1-story	30×20	May 7,1890	Education in Alaska, 1888–89.
Gambell	1,000.00	Frame, 1½-story	40×20	Oct. 31,1891	Education in Alaska, 1890–91.
Golofnin	(a)	do	40×30		License fund.
Haines	3,275.00	do	67×30	Nov. 22,1905	Do.
Hoonah	1,850.00	Frame, 1-story	60×30	Sept. 8,1897	Education in Alaska, 1896–97.
Icy Cape	2,965.65	do	65×30	Jan. 11,1907	License fund.
Igloo	(a)	Frame, 1½-story	56×22		Education in Alaska, 1907–8.
Jackson	3,086.34	do	67×30	Mar. 27,1906	License fund.
Juneau	1,300.00	Frame, 1-story	60×30	Oct. 13,1894	Education in Alaska, 1894–95.
Juneau, residence		do	14×18	June 26,1907	
Kake	4,985.00	Frame, 1½-story	60×30	Feb. 6,1906	License fund.
Kenai	(a)	do	56×22		Education in Alaska, 1907–8.
Killisnoo	3,795.00	do	67×30	Mar. 10,1906	License fund.
Kivalina	5,217.78	do	75×30	Aug. 3,1906	Do.
Klawock	2,080.00	do	60×30	June 26,1906	Do.
Klinquan	1,350.00	do	40×22	Oct. 14,1905	Do.
Klukwan	3,400.00	Frame, 1-story	44×28	Oct. 6,1906	Do.
Kobuk	(a)	Log, 1-story	36×24		Education in Alaska, 1907–8.
Kokrines	(a)	do	b36×24		Do.
Kotzebue	5,419.93	Frame, 1½-story	75×30	Mar. 14,1905	License fund.
Nenana	(a)	Log, 1-story	36×24		Education in Alaska, 1907–8.
Point Hope	5,380.74	Frame, 1½-story	75×30	Sept. 21,1906	License fund.
Rampart	(a)	Log, 1-story	b36×24		Education in Alaska, 1907–8.
Saxman	1,780.00	Frame, 1-story	60×30	Nov. 27,1895	Education in Alaska, 1895–96
Seldovia	(a)	Frame, 1½-story	56×22		Education in Alaska, 1907–8.
Shakan	2,080.00	do	60×30	July 31,1906	License fund.
Shishmaref	4,199.73	do	36×24	Feb. 21,1906	Do.
Sinuk	(a)	do	56×22		Education in Alaska, 1907–8.
Sitka	1,537.20	Frame, 1-story	25×40	Dec. 14,1888	Education in Alaska, 1887–88.
Stevens Camp	(a)	Log, 1-story	b36×24		Education in Alaska, 1907–8.
St. Michael	5,586.17	Frame, 1½-story	75×30	Oct. 9,1906	License fund.
Tanana	3,399.48	Log, 1½-story	42×31	Feb. 21,1907	Do.
Tee Harbor	702.89	Frame, 1-story		Dec. 21,1904	Do.
Teller	2,188.58	do	40×30	Sept. 21,1907	Do.
Unalakleet	1,800.26	Frame, 1½-story	75×30	May 15,1903	Do.
Unalaska	3,135.25	do	55×31	Oct. 28,1895	Education of Indians, 1894–95.
Wainwright	4,801.65	do	75×30	June 5,1905	License fund.
Wales	5,026.67	do	75×30	Mar. 3,1905	Do.
Wrangell	5 605.00	do	60×30	May 26,1906	Do.

a Unfinished. b Also residence, 23×30 feet.

Whole number of school buildings, 45.

TABLE 2.—*United States public schools for natives of Alaska held in buildings not owned by the United States.*

	Location.	Building provided by—
1	Anvik	Episcopal Mission.
2	Bethel	Moravian Mission.
3	Chignik	Alaska Packers' Association.
4	Circle	Episcopal Mission.
5	Dillingham	Cannery Company.
6	Eagle	Episcopal Mission.
7	Kasaan	Kasaan Bay Mining Company
8	Koserefsky	Roman Catholic Mission.
9	Nome	Eskimo-Indian Association.a
10	Nulato	Roman Catholic Mission.
11	Nushagak	Moravian Mission.
12	Quinhagak	Do.
13	Tatitlek	Russian Mission.
14	Yakutat	Swedish Lutheran Mission.
15	Yukon	Episcopal Mission.
16	Petersburg	Norway Fishing and Packing Co.

a Building rented from this association.

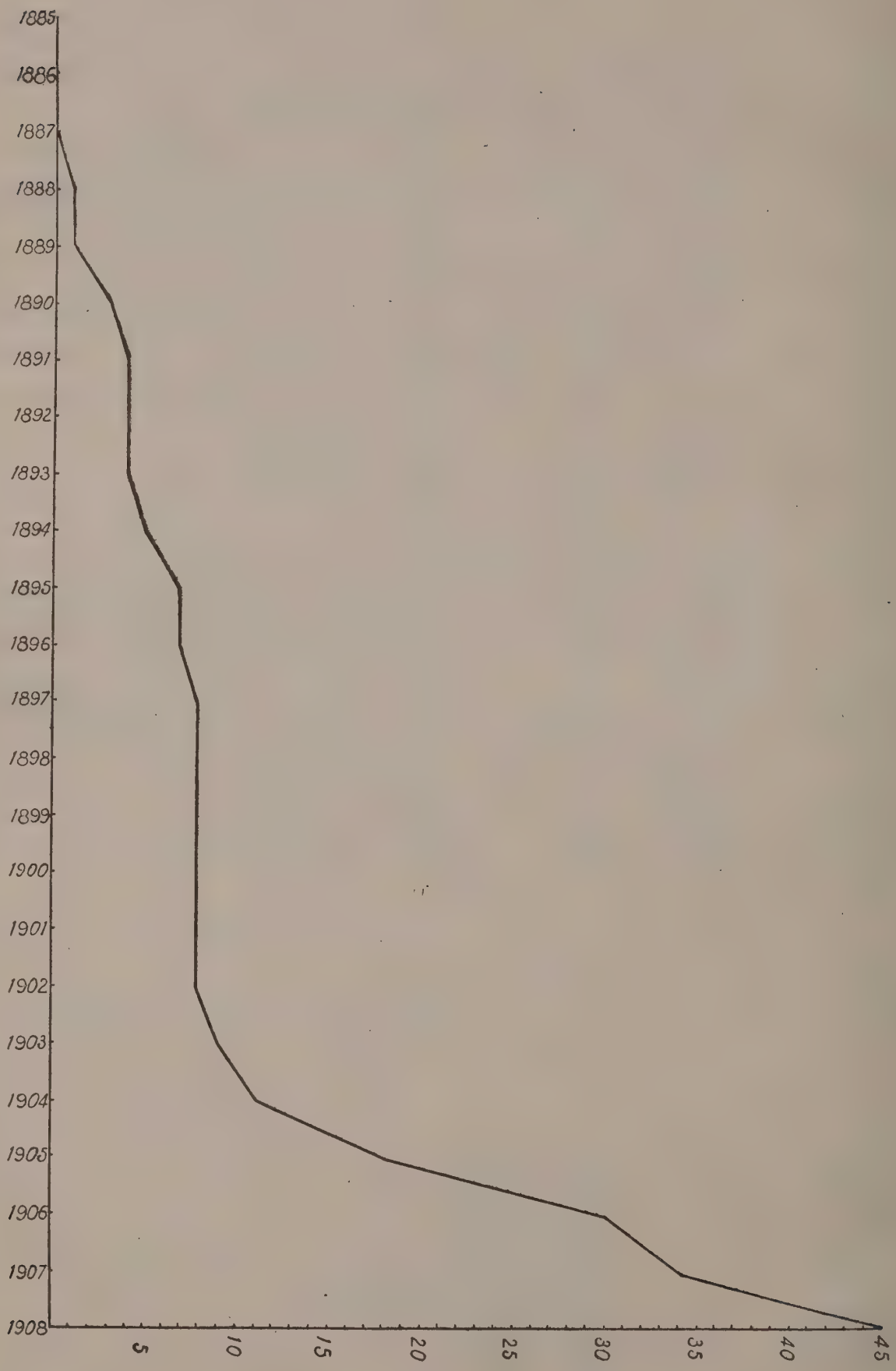

DIAGRAM 2.—Number of school buildings belonging to the United States in Alaska each year since 1887.

TABLE 3.—*Attendance and cost of maintenance.*

Schools.	Number months taught.		Average daily attendance.		Enrollment.		Total cost, 1906–7.	Cost per pupil, 1906–7.	
	1905–6.	1906–7.	1905–6.	1906–7.	1905–6.	1906–7.		Based on average attendance.	Based on enrollment.
Afognak	9	9	57	13	87	35	$1,036.68	$79.74	$29.62
Anvik	.....	5	.....	13	.....	20	430.93	33.15	21.55
Barrow	9	9	32	41	75	102	2,218.90	54.12	21.75
Bethel	9	9	43	33	65	48	1,366.50	41.40	28.47
Bettles	.....	9	.....	16	.....	44	1,589.70	99.35	36.13
Carmel	6	5	13	10	31	24	418.77	41.87	17.44
Chignik	.....	2	.....	16	.....	22	.....	.....	.....
Copper Center	8	5	5	6	51	38	485.40	80.90	12.77
Council	.....	7	.....	16	.....	30	563.93	35.24	18.80
Deering	9	9	21	18	62	32	1,335.57	74.20	41.73
Dillingham	4	4	31	17	37	36	340.00	20.00	9.44
Douglas	.....	7	.....	19	.....	53	666.33	35.07	12.57
Eagle	5	9	14	19	28	21	859.80	45.25	40.95
Gambell	9	9	54	37	74	62	2,063.97	55.78	33.29
Golofnin	9	9	46	38	76	63	705.77	18.57	11.20
Haines	8	7	16	15	43	41	621.36	41.42	15.15
Hoonah	.....	9	.....	16	.....	109	817.64	51.10	7.50
Icy Cape	.....	9	.....	4	.....	12	2,346.73	586.68	195.56
Igloo	.....	7	.....	21	.....	40	1,619.05	77.09	40.47
Ikogmute	.....	6	.....	8	.....	15	478.00	59.75	31.86
Iliamna	.....	.....	.....	.....	.....	.....	3,048.57	.....	.....
Jackson	8	9	13	15	42	42	756.22	50.41	18.00
Juneau	.....	9	.....	12	.....	45	815.33	67.94	18.11
Kake	6	9	27	19	91	112	774.52	40.76	6.91
Kasaan	7	9	19	16	36	42	975.24	60.95	23.22
Killisnoo	8	8	16	16	98	94	777.88	48.61	8.27
Kivalina	9	10	30	26	71	62	1,360.80	52.33	21.95
Klawock	8	9	14	19	59	51	804.52	42.34	15.77
Klinquan	9	9	29	26	52	57	755.03	29.04	13.24
Klukwan	8	9	21	14	42	58	1,018.87	72.77	17.56
Koserefsky	9	9	95	89	99	92	1,465.04	16.46	15.92
Kotzebue	9	10	33	30	145	120	1,146.19	38.20	9.55
Nome	.....	7	.....	17	.....	56	720.00	42.35	13.00
Nulato	8	9	14	10	33	45	743.25	74.32	16.51
Petersburg	.....	3	.....	9	.....	34	501.79	55.75	14.75
Point Hope	.....	9	.....	11	.....	49	2,164.74	196.79	44.18
Quinhagak	6	7	15	19	25	36	640.22	33.69	17.78
Saxman	6	8	8	8	35	26	679.75	84.97	26.14
Shakan	7	4	10	12	33	26	245.65	20.47	9.44
Shishmaref	.....	7	.....	39	.....	53	1,710.16	43.85	32.26
Sinuk	.....	9	.....	12	.....	44	1,543.43	128.61	35.07
Sitka	3	7	29	19	64	82	529.15	27.85	6.45
St. Michael	7	9	43	34	70	54	1,159.03	34.08	21.46
Tanana	.....	.....	.....	.....	.....	.....	228.18	.....	.....
Tatitlek	.....	7	.....	30	.....	43	631.33	21.04	14.68
Tee Harbor	2	1	9	7	23	9	60.00	8.57	6.66
Teller	9	9	23	23	31	30	1,044.97	45.43	34.83
Unalakleet	9	9	85	55	163	76	999.66	18.18	13.15
Unalaska	.....	9	.....	65	.....	100	1,850.11	28.46	18.50
Wainwright	7	9	27	19	47	37	2,637.35	138.80	71.28
Wales	9	9	48	51	117	105	2,476.91	48.56	23.59
Wrangell	7	5	9	17	32	40	442.35	26.02	11.05
Yakutat	6	7	10	9	47	42	524.75	58.30	12.50
Yukon	9	8	22	15	52	30	820.21	54.68	27.34
Total	.....	.....	981	1,139	2,136	2,639	56,016.23	.....	.....
Average	.....	.....	28	22	61	51	1,056.91	63.55	24.81

The averages of cost per pupil based on average attendance and on enrollment were obtained by dividing the total cost by the total average attendance and by the total enrollment, respectively.

The distribution of the items for 1906–7 in the above table is as follows:

	Entire range.	Two middle quartiles.	Median.
Daily average attendance	4–89	13–26	17
Total enrollment	9–120	34–58	44
Total annual cost	$60–3,000	$620–1,300	$800
Cost per pupil, based on average attendance	$8–586	$33–60	$45
Cost per pupil, based on enrollment	$6–195	$13–28	$18

The wide range in the cost of schools is caused by differences in the cost of sending supplies and in the salaries of teachers, inaccessibility being the prime reason for the differences in both cases.

The great differences between the cost per pupil based on average attendance, and the cost per pupil based on enrollment, present strong and convincing arguments for the passage of a compulsory-education law. Based on averages, the differences are 132 per cent and 156 per cent, and based on medians, the differences are 159 per cent and 150 per cent of the lesser amounts, respectively.

TABLE 4.—*Expenditure of appropriation, Education of natives of Alaska, 1907.*

Appropriation	$100,000.00
Salaries of officials and clerks	6,470.00
Salaries of three superintendents	4,350.00
Salaries of 64 teachers	37,652.80
Supplies	7,612.15
Rations for destitute natives	623.30
Repairs	60.82
Fuel and light	7,808.02
Rent	45.00
Freight	4,633.66
Traveling expenses	4,924.60
Two buildings (partial payment)	5,697.26
Balance	20,122.39
	100,000.00

The following table shows the history of Congressional appropriations for education in Alaska from the establishment of the Alaska school service until 1907:

TABLE 5.—*Appropriations for education in Alaska.*

First grant to establish schools, 1884	$25,000	Annual grants, school year—Continued. 1893–94	$30,000
Annual grants, school year— 1886–87	15,000	1894–95	30,000
1887–88	25,000	1895–96	30,000
1888–89	40,000	1896–97	30,000
1889–90	50,000	1897–98	30,000
1890–91	50,000	1898–99	30,000
1891–92	50,000	1899–1900	30,000
1892–93	40,000	1900–1901	30,000

Amount received from one-half of license fees collected outside of incorporated towns in Alaska:

From March 3, 1901, to June 30, 1906	$334,438.46
Annual grants:	
1905–6	50,000.00
1906–7	100,000.00

TABLE 6.—*List of persons in the Alaska School Service, 1906–7.*

Harlan Updegraff, chief of Alaska division, New York.
Sheldon Jackson, general agent of education in Alaska, Alaska.
William Hamilton, assistant agent, Pennsylvania.
Walter Shields, clerk to general agent, Pennsylvania.
Mrs. L. E. Condron, stenographer, District of Columbia.
Alexander H. Quarles, stenographer, District of Columbia.
William A. Kelly, superintendent of schools, southern and southeastern Alaska, Pennsylvania.
Axel E. Karlson, superintendent of schools, western central Alaska, Alaska.
William T. Lopp, superintendent of schools, northwestern Alaska, Washington.

TEACHERS.

School.	Name.	Appointed from—
Afognak	Miss Louise L. Kurtz	Missouri.
Anvik	Miss Bertha W. Sabine	Alaska.
Barrow	Mrs. S. R. Spriggs	Do.
Bethel	S. H. Rock	Do.
Do	B. K. Helmich	Do.
Bettles	Mrs. Mary E. Stokes	Texas.
Carmel	J. H. Romig	Alaska.
Copper Center	Mrs. G. S. Clevenger	Washington.
Council	Miss Mollie Delilak	Alaska.
Deering	Mrs. Lizzie Gooden	Do.
Do	Miss Bertha Cox	Oregon.
Do	Miss Anne Buck	Alaska.
Dillingham	C. M. Link	Do.
Eagle	George E. Boulter	Do.
Gambell	John D. Bigger	Kansas.
Golofnin	Miss Alma Wretling	Minnesota.
Haines	Miss Mary Mackintosh	Alaska.
Hoonah	Miss Stella Dunaway	Missouri.
Icy Cape	F. F. Fellows	Oregon.
Igloo	C. Tjernagel	Washington.
Ikogmut	A. Sipary	Alaska.
Iliamna	H. E. Redmyer	Washington.
Do	P. J. Hatta	Do.
Do	P. A. Rista	Do.
Do	Miss Hannah E. Breece	Pennsylvania.
Jackson	Miss M. MacLean	Illinois.
Juneau	Miss Selma Peterson	Do.
Kake	Mrs. Bell G. Badley	Idaho.
Kasaan	A. R. Law	Missouri.
Killisnoo	Mrs. C. Kilborn	Pennsylvania.
Kivalina	Mrs. P. Walton	California.
Klawock	Miss Nell G. Edgar	Kansas.
Klinquan	Mrs. J. V. McCullough	Minnesota.
Klukwan	Miss Maud L. Gaddis	Illinois.
Koserefsky	A. J. Markham	District of Columbia.
Do	Miss Mary Lidwin	Alaska.
Kotzebue	Mrs. Eva W. Geary	Do.
Nome	Mrs. Mary McManus	Do.
Nulato	J. V. O'Hare	Do.
Petersburg	H. A. Philips	Kansas.
Point Hope	E. A. McIntosh	Alaska.
Quinhagak	Mrs. L. A. Schoechert	Pennsylvania.
Saxman	Miss Laura Oakes	Missouri.
Shakan	Thomas Smith	Alaska.
Shishmaref	P. H. Laupman	Oregon.
Sinuk	M. A. Sellon	Do.
Sitka	Miss Cassia Patton	Alaska.
St. Michael	Franklin Moses	Do.
Do	Miss E. Hopwood	Do.
Tatitlek	Andrew Malakoff	Do.
Tee Harbor	Miss Selma Peterson	Illinois.
Teller	Miss Jorgine Enestvet	Washington.
Unalakleet	Miss Klatcha Ivanoff	Alaska.
Do	Misha Ivanoff	Do.
Unalaska	J. J. Potter	Oregon.
Do	Miss M. A. Vinton	Do.
Wainwright	J. H. Kilbuck	Kansas.
Wales	A. N. Evans	Pennsylvania.
Do	Thomas Illayok	Alaska.
Wrangell	Miss Mabel Winter	Oregon.
Yakutat	E. A. Rasmusson	Wisconsin.
Yukon	Miss Lizzie J. Woods	Alaska.

The most pressing social problem in Alaska to-day is the amelioration of the condition of the natives of that region. Three different courses of action are required for its solution.

(1) The removal of those forces which are pulling the natives down.

(2) The multiplication of those influences which will enable them to advance.

(3) The issuance of food and clothing to destitute natives until they become self-supporting.

The problem should be attacked immediately, and with persistence and thoroughness in all parts of Alaska. Moreover, it must be attacked intelligently, in the light of social and educational science and of the experience of the Government in dealing with the Indians of the States. If such steps are not taken, there is grave danger that the physical, economic, and moral decline of the native races of Alaska will obtain such momentum that it will be very difficult, if not impossible, ever to advance them to higher stages of civilization.

The forces which are pulling the natives down, and which must be removed, are—

(*a*) The selling and giving of liquor to natives by white men.

(*b*) Illicit intercourse between white men and native women.

(*c*) Destruction of fish and game.

(*d*) The ravages of disease.

(*e*) Disregard of the rights of the natives.

Among the measures most necessary to prepare the natives for efficient participation in the future life of Alaska are:

(*a*) Instruction in the English language, so that it can be spoken, read, and written.

(*b*) The development of the native industries.

(*c*) The introduction and development of new industries adapted to the region and to their abilities.

(*d*) Instruction in methods of marketing their products.

(*e*) Instruction in arithmetic until ability is developed to perform mathematical computations incident to business transactions.

(*f*) Instruction in sanitation and personal hygiene.

(*g*) Instruction in cooking and domestic economy.

(*h*) Compulsory education law so framed as to be applied at discretion.

(*i*) Recognition of property rights by express law.

(*j*) Instruction in morality.

(*k*) Broadening and deepening of religious life as their development in above lines makes it possible.

Some of the temporary measures that must be taken in order to assist in making the natives again self-supporting, as they were before the arrival of the white man, are:

(*a*) Issuance of rations and clothing in those places where there is actual destitution.

(*b*) Medical attention.

(*c*) Enforcement of sanitary measures in native villages.

(*d*) Enforcement of present laws, in order to secure protection of the natives.

(*e*) Passage of more stringent laws to accomplish this end, if necessary.

It is not necessary that different agencies and institutions be constituted for the carrying out of each of these three different courses of action. The school or the hospital, the teacher or the physician or the superintendent, may serve as agencies for carrying on the work in all the different directions named.

Before outlining in detail the manner in which these questions should be dealt with I desire to present several principles which, in my opinion, should underlie the operations of the various plans. This will contribute to greater clearness in the understanding of the recommendations which follow.

1. The natives of Alaska should be prepared to participate happily in, and to contribute efficiently to, a society in which the white men and natives will live harmoniously in accordance with the standards of American civilization.

This does not imply that the native races should lose their integrity. It means simply that the fact must be recognized that from this time the life of the native will be dominated by the life of civilization. He has come in contact with it, and has willingly surrendered. His aims are mediated by what he has learned from the white man. He has accepted the Christian religion, he prefers the white man's food and clothing, and he is adopting the structure of the white man's house whenever he is financially able. Furthermore, in many parts of Alaska his income is derived very largely from labor performed for the white man.

2. The native races may be elevated to a higher standard of civilization only through a system of education which recognizes the community as the unit of effort and the individual as the subunit.

The laws of nature bind the individual to his own social stock by such strong ties that they can rarely be broken. The social habits and impulses which have been inherited or established by social contact in the early years largely shape the life of the individual. On the other hand advancement of a race may be secured only by the contribution of its own members to its social life. The problem in Alaska requires the most rapid advancement of the native races that is possible. At first sight it would seem, therefore, that by giving to the brightest young people the best possible education in the schools of

civilization the most rapid advancement of the race would be secured. It must be remembered, however, that the advancement of an inferior race is not dependent upon the extent of the acquirements of individuals of the habits and impulses of civilized life, but upon the extent of the contributions of the individual of higher habits and better impulses to his fellow-men. The most rapid advancement of an inferior race will be brought about, therefore, by educating the brightest boys and girls in such ways as will cause them to render the greatest service to their own people.

Experience in the education of the Indians in the United States has proven, generally speaking, that the individual who has by a process of education, apart from his own people, taken on a large share of the habits and the impulses of civilization, contributes much less to the promotion of the welfare of his race than the boy or girl who, although not progressing so far in school subjects, has lived with his tribe in his native environment. This is because the hereditary and early influences draw him back to the mode of life peculiar to the race, while at the same time the better methods of living enjoyed while at school make him dissatisfied with the tribal life and cause him to stand aloof from active and efficient participation in it. His life thus counts for little, and the effort of the higher civilization that had been exercised for him bears little fruit.

Thus for the happiness of the individual Alaskan, for the welfare of the native races, and for the sake of a reward for labors performed by representatives of civilization, the education of the individual must be made subordinate to the advancement of the race. His education should be carried on in constant contact with his people and must prepare him for a definite place in their social life. The community thus becomes the unit of effort, the individual the subunit.

3. The system of education must include all sides of native life and must observe proper coordination in the development in the various elements in that life.

Civilization has been evolved by a fairly even progress in the different elements that have composed it at its various stages of development. It was through efficient participation in these related elements that increased control over nature and self was gained and the physical, mental, moral, and spiritual life of the race elevated. The Alaska natives should pass through this process under competent direction. Progress in civilization should be made to evolve from within themselves. The habits, interests, and tendencies of civilized life with which they come in contact must be chosen or rejected by them and those which are good assimilated in their own lives and made to modify their habits and impulses in the right directions. Aid is greatly needed in this process. If properly given, "the short cuts" in the evolution of civilization may be taken; and, although

the process must necessarily be slower than most people desire and think, yet as compared with the time it has taken for the Germanic tribes to develop from one stage of civilization to another, the advancement of the native tribes of Alaska should be in the next few decades very rapid.

At the present time the elements in the life of the Alaskan natives which need greatest attention are the industrial and the physical in relation to sanitary methods of life. The industries which nature affords and also those in which they can find employment by the white man should be developed in order that all the people may rise to a higher stage of civilization through the experiences gained by working with their hands and intellects in the every day duties of life. Increased command over nature will bring a greater economic return. This will enable them to purchase the conveniences and comforts of life and will greatly promote more sanitary methods of living. Better health will in turn produce greater efficiency in industrial enterprises. With the development of these two mutually helpful elements the high ideals that have been employed by the church and the school will have a fair chance of realization and the temptation to drive away disappointment and discouragement by drink will be removed.

The political element in the native life at the present time needs recognition and in the future such development as the advancement of civilization will warrant. At the present time their political status makes them neither citizens nor aliens. In consequence there is no way in which they can gain any of the rights of citizenship. A well-rounded development demands recognition in the political life of the State, and the grant of some privileges should be made at the present time.

4. Governmental action should not contribute to the lessening of self-initiative and self-support, but should rather develop these capacities. Although this principle will be universally admitted, the extent of its application is not clearly seen. The adoption of the reservation system for the natives of Alaska would by its paternal character and artificial barriers be apt to foster dependence and to weaken self-initiative. For these reasons it is to be avoided if possible. On the other hand, the immense value of constant unrestrained contact with the institutions of civilization will account greatly for the advancement of the natives, provided the bad elements in the social life can be restricted by a strict enforcement of the laws already upon the statute books. For these reasons it does not seem to me wise to advocate the creation of a separate administrative system until after all efforts to promote the advancement of the natives of Alaska under the action of the police system of the district as now constituted, and a corps of well organized and sympathetically disposed body of officials whose business it is to foster the develop-

ment of the natives, have failed. It is the duty of the Government toward these people to complement the present system of control and not to substitute another for it.

5. In the working out of the policy based upon these principles due caution should be observed. Those needs for which proper remedies are apparent should first be attended to. From the experience gained in this process, from contemporaneous investigations carried on throughout the entire district of Alaska with a view of determining the proper extent of the work, the more intricate problems may be solved with greater success.

The problem of caring for the natives of North America and of promoting their advancement remains unsolved. Moreover, the Alaska natives are of a different stock from the Indians of the States. Their attitude toward civilization has been friendly and receptive, and they are now self-supporting. This fundamental difference in race and in attitude requires a different method of approach from that followed in the supervision of the Indians in the States, and the absence of any well defined or generally accepted conclusions as to the best course of action to pursue demands caution and careful and thorough investigation by those who know the life of the Alaskan natives and are competent by reason of their intelligence, experience, and study in social questions to do the work. In the meantime there are deplorable conditions which must be removed, and concerning the wisdom of the plans proposed there is little doubt. These should be prosecuted at once and tested. In the meantime, a careful investigation by a sympathetically disposed and competent set of officials of the entire situation will point out the way for future action with greater certainty of a successful solution.

The following recommendations for the extension of the work of this division along those lines which have been indicated as desirable and in accordance with the principles above enumerated are respectfully submitted:

1. That an effort be made to secure the passage of a law which will grant to the natives of Alaska, under proper safeguards, the same rights and privileges under the public land and mineral laws as those now enjoyed by citizens of the United States. At the present a native of Alaska can possess a legal title only to land within the borders of a town site. Many of the most intelligent natives are accumulating wealth. Ownership in land not within a town site is often desirable to the successful operation of their industries. The more intelligent are also able to conduct mining operations on a small scale, and this source of wealth should in justice be pointed out to them. Moreover, their inability to secure legal recognition of individual property rights to land acts as a deterring influence in the advance-

ment of the natives by blighting their ambition. Rights to the soil have been granted to the American Indians because it was believed it was in justice due them; the same rights should be extended to the natives of Alaska. When it is taken into account that no reservations have ever been granted them, and that even now it would be very difficult to secure and enforce such reservations if they were desired, it seems that it is very scant justice that would be meted out to the natives of Alaska by conferring upon them the rights and privileges of citizens in this respect, which rights and privileges in turn entail future responsibilities in the payment of taxes.

2. That an effort be made to secure the passage of a law reserving from all forms of location and occupancy under the Alaska coal-land laws of the coal fields lying near Wainwright and Icy Cape. The former chief source of fuel supply for this region—driftwood from the Yukon—has been stopped by reason of the fact that this stream has now become a path of commerce. The waters have been cleared of all obstructions and the trees along the banks have been to a great extent cut away. Furthermore, contact with civilization has introduced better methods of living and caused the erection of more sanitary houses, and in time their number will be increased. These houses demand more fuel than the native igloos; hence it is an absolute necessity for the preservation of the Eskimo race in Alaska that a new source of fuel supply be found for them. The reservation of these coal fields for their exclusive use will furnish this supply, and at present no other source seems available; hence it appears that the setting apart of these mines for their exclusive use is an absolute necessity for the preservation of the race.

I am of the opinion that the setting apart of these coal fields for the natives of Alaska will not deprive a citizen of the United States of any benefit from them, because of the fact that the mines are practically inaccessible, being located 300 miles north of the Arctic Circle, which region is icebound for ten months of each year, and for the further reason that the coal, being of comparatively recent geological formation, is unsalable in the coal market.

I would respectfully suggest, furthermore, that the proposed legislation be in such a form as to give the Secretary of the Interior the power to regulate the mining of the coal and the selling of the same to other natives of Alaska, and to schools and missions. It is my desire that the enterprise be conducted in such a manner as to make it beneficial both to those natives who mine the coal and to those who consume it. The industry can be made a very effective agent for the education of those natives who will be actively engaged in it, and the plane of living of all the natives of that region may be elevated if the enterprise is conducted in such a manner as to bring about a general use of coal as fuel. The benefits of the use of coal as fuel will extend

to the promotion of their fishing and hunting industries as well, by making it possible for them to have steamboats for hunting the whale and walrus, which extension will greatly better their economic status.

3. That an effort be made to secure the passage of a law conferring upon the Secretary of the Interior the authority to draw up a sanitary code applicable to all natives of Alaska, and making a failure to comply with its provisions a misdemeanor punishable in the courts. It is a well known fact that sanitary conditions in the native villages of Alaska are very bad. Dead animals, decaying food, and all sorts of refuse are left lying about in all parts of the village promiscuously. Their houses are so constructed as to admit but little light and air and the effort is constantly made to shut out fresh air. Filth is allowed to accumulate within the house and little or no effort is made to care for expectorations of those afflicted with pulmonary consumption. These points will serve to indicate the insanitary character of the daily lives of the Alaskan natives. Other facts might be mentioned for the sake of a more complete description, but space will not permit. There is no question that the passage and enforcement of such a law would be of incalculable benefit to the native of Alaska.

4. That an effort be made to secure the passage of a law making the selling or giving of liquor to a native a felony. The present law, which makes such an act a misdemeanor, is not enforced in some parts of Alaska, and experience shows that when it is enforced it is to a great extent ineffectual. Those who sell or give liquor to natives are usually white men of low character—those who would benefit Alaska more by their absence than by their presence within its borders. On the other hand, the law in its present form is taken advantage of; the jail at Nome during the past few years has been full of men who took this means of getting their board and lodging, many of them being committed for two or more winters in succession. The United States and town officials earnestly advocate the passage of such a measure. While I doubt its being effectual in many places, yet, I believe that a law making the selling of liquor to natives a felony would secure a better condition of affairs than that which now exists.

The evils arising from the drinking of liquor by the natives of Alaska would be greatly lessened by such a modification of the present license law as would restrict the selling of liquor to within the towns.

5. That an effort be made to secure the passage of a law requiring the attendance at school of all children between the ages of 6 and 16, inclusive, during the entire school year, except at such times as the child is mentally or physically unable to attend and at times when his services are needed in order to support the family and he is actively engaged in so doing; and making absence from school for a specified

period a misdemeanor upon the part of the parent punishable in the regular courts.

Teachers in most sections of Alaska complain of inability to secure the prompt and regular attendance of pupils. Many of the teachers go out each morning to gather them in, and some offer rewards for attendance. Their parents oftentimes assist the children in hiding from the teacher and are even, in some cases, opposed to their attending school. Our statistics for last year show that from 60 to 100 per cent greater attendance could have been secured by the existence of a compulsory education law. This means an increased efficiency of 60 per cent from the expenditure of the funds spent in the support of schools.

In many of the villages of Alaska it would be impracticable to enforce a compulsory school attendance law owing to the fact that there is no United States commissioner or United States deputy marshal within a reasonable distance; also inasmuch as there has been little or no difficulty arising from this source in some of the villages, I deem it wise that such a law should be so framed that a village could be put under, or excused from, the operation of the law at the discretion of the Commissioner of Education. It should not be resorted to in any village until all other means have failed, and then not unless there exists near at hand the full machinery of a local court.

6. That an effort be made to secure such legislation as will enable the Secretary of the Interior to erect and equip hospitals which will serve as centers for relieving disease and destitution and for furnishing instruction to native girls in nursing, and to employ physicians and nurses for the management of the same.

The service of competent physicians and proper care in sickness is one of the greatest needs of the natives of Alaska. Diseases are general among them. The few statistics that have been collected indicate that in some villages about one-half of the inhabitants are afflicted with either tuberculosis or syphilitic diseases. Epidemics cause large fatalities. While ill their only shelter is an insanitary dwelling as described above. These conditions contribute very largely to the spread of diseases and account for the large number of deaths. With the erection of hospitals the large number of fatalities should be considerably reduced. The physicians and nurses who would be in charge of these hospitals would be expected to give medical care and treatment to all natives who applied. This would stop to a great extent the consumption of nostrums and of drugs recommended by white people who are not competent to advise in such matters. The native has great faith in medicine, and will take that which almost anyone recommends. The erection of hospitals and the furnishing of medical aid by the Government will relieve the physicians of Alaska of considerable medical treatment extended

by them in charity to the natives. The physicians of Alaska deserve great credit for the interest they have taken in the physical welfare of the natives and for the aid rendered by them.

The existence of these hospitals for natives and the instruction given by those in charge will also, in connection with the carrying out of proper sanitary measures, promote the health of the white people in Alaska by lessening the danger of contagious diseases.

7. That an effort be made to secure the passage of a law which will enable the Secretary of the Interior to protect the natives of Alaska under existing laws. Many of the natives are ignorant of the existence of a system of laws and of any rights under them, or if they are aware of laws to which they might appeal, they do not understand the process of making that appeal. Their recognition of the superiority of the white race, combined with their natural tendency to avoid conflict, causes them to submit to the most flagrant injustices and crimes. Their homes and the soil upon which their villages have been located for years and their fishing grounds have been taken from them in defiance of law. To a considerable extent their fish supply has been cut off and the forests have been depleted of their game, so that it is difficult for them to secure an adequate supply of food; their bodies have been weakened by liquor and the evils that have followed in its train, and their moral force has been correspondingly enervated. They need protection from the greed and passion of the unprincipled white man in order to secure a sound basis of health and thus a sound basis for industrial efficiency and wealth.

8. That an effort be made to secure such legislation as will enable the Secretary of the Interior to promote the general welfare of the natives of Alaska by assisting them to establish their industries upon a substantial basis. They need not only instruction in the best methods of fishing, which the Bureau of Education may furnish under the existing appropriation, but also capital to construct small plants for packing the fish properly and the services of an agent to attend to the marketing of the same. After several years of experience some of the brightest of the natives will have acquired a sufficient amount of capital and the requisite intelligence and foresight to carry on the business and to employ other natives in the newly developed industry. Of this there is no doubt, for some natives in southeast Alaska now conduct canneries for themselves and some of the Eskimos of the north manifest very good ability in the marketing of their reindeer and in conducting business with the merchants. Some of them keep a bank account and issue checks as properly executed as those of the business men with whom they deal.

Then, too, they need assistance in the erection of more sanitary houses. More windows and better ventilation are prime necessities for sanitary living. After the advantages of such houses, as pre-

sented by instruction, are confirmed by experience, they will erect houses of the proper kind for themselves. In the meantime the Government should furnish window frames and lights and simple ventilation apparatus to all those natives who will use them in building their houses.

Other methods might be described but space will permit only passing mention. The digging of cold-storage cellars in the frozen ground for the preservation of meats, the construction of sawmills in the wooded sections, assistance in the establishment of stores, the erection of large workhouses in which boats, skin or wooden, could be made, the erection of wash houses where water could be heated and the family washings be done, the erection of outbuildings, the conducting of reindeer institutes, the offering of prizes for the best vegetables or the best kept garden, the transportation of patients to the hospitals, and the expenses of establishing sanitary conditions in the villages. It would not take many years of assistance along the line of the promotion of industries on the one hand and in the securing of improved sanitary conditions on the other to bring about the permanent maintenance of improved industries and of healthful living conditions by the natives themselves, without assistance and encouragement from any source.

9. That an effort be made to secure the passage of the appropriation for the education of natives of Alaska in such form that the appropriation be made immediately available and remain available until expended.

The peculiar climatic conditions of Alaska make these provisions very desirable. Supplies and building materials can be shipped to northern and western Alaska only from June to September, inclusive. A new building can not possibly be begun with materials shipped during the same season before July 1, and more probably not before the middle of the month. Work upon it must cease because of weather conditions by November 1, and preferably by October 1. It is not practicable to ship materials and supplies during the first months of the fiscal year and to permit them to lie out in the open during the winter in order to build the following spring; hence building materials must be purchased in the States and shipped before July 1, and the building must be erected after that date. These conditions cause a unit of work to extend over two fiscal periods. This causes embarrassment in the making of plans, because of the uncertainties of the amounts and the wording of the appropriation bills in the incoming years. It divides every appropriation into two parts—that which may be used at the close of the first season and that which must be reserved to start the work of the next season. At times a large part of the portion reserved for the next season may be lost, owing to uncertainty as to the continuance of the appropriation.

In those instances wherein an extension of the work is made possible by a change in the wording of the appropriation, the work to be performed by such extension can not be commenced at a sufficiently early time to accomplish substantial results unless the appropriation is made immediately available, and in the event that the appropriation is made to terminate with the close of the fiscal year and is not renewed, it is quite certain that but a small part of the fund set aside for new work can be used advantageously.

10. Turning now from recommendations in connection with legislation to administrative matters, I would first recommend the appointment of special agents to fight the liquor traffic, in so far as it reaches the natives. Practically no one outside of the ranks of the teachers and missionaries in Alaska is sufficiently interested in the natives to labor long or hard in a struggle against the selling or the giving of liquor to natives, and the numerous duties of these teachers and missionaries would prevent them from giving long periods of time to this work, even if they had the skill and courage to carry on such a campaign. Consequently the natives remain to a large extent unprotected from the influences that liquor brings into their lives. Probably more than one-half of the diseases, practically all the sexual intercourse between white men and native women, and the resulting half-breed population of inferior character, are to be attributed to the influences of liquor. A thoroughly organized and efficient corps of employees to assist the other agents of the Bureau is necessary to attack successfully this monstrous evil.

11. That the northern and southern districts, as at present constituted, be abolished, and that three districts be established in their stead; that one superintendent be appointed for each of the last two, and that an additional assistant superintendent be appointed in the northern district. This will make a total of three superintendents and two assistant superintendents in the entire district of Alaska.

The work to be done in each of these fields differs so much in character that superintendents of different qualifications are required to do the work most successfully. The northern district is so large that the services of three men are necessary to efficient supervision.

12. That new schools be established in the following places: On the Yukon and tributaries—Pilot Station, Shageluk Slough, and among the Ketchumstock Indians. In Arctic Alaska—Noatak, Selawik, and Kewalik. In southwestern Alaska—Susitna, Tyonic, and Kaguak.

13. That portable schoolhouses be erected in places where the natives remain but a short time in spring and summer, in order that their children may receive the benefits of schooling during those months. In many places the natives leave their permanent villages

in March and April to go to their fishing grounds. The children thus lose several months of school each year.

14. The employment of teachers for twelve months of the year where practicable. The natives need the assistance and direction of a sympathetic supervisor all the time. Under the present arrangement of employing teachers for eight or nine months in the year, the natives are left during the summer without the guidance of anyone who is interested in their welfare. From the point of view of the promotion of the welfare of the natives through a development of their industries, this period is more important than that of the regular school term. Teachers so employed would be expected to go with the natives to their fishing grounds in order to render them such assistance as would be found desirable.

15. That instruction in elementary agriculture be introduced in all places where the ground becomes sufficiently warm for plants to grow during the month of May; instruction in the same to begin by the carrying on of experiments in the schoolroom during the two months previous to outdoor work. Where practicable there should be a school garden, large enough to give each child a definite portion of it for its own. Efforts should also be made to encourage the parents of the children to plant gardens, the teacher giving them such instruction as appears to be needed.

16. That the natives of St. Lawrence Island, and those who gather annually about Hotham Inlet during the summer time, be given definite instruction in the catching, curing, packing, and marketing of cod and salmon. At present their knowledge of these arts is deficient in all respects. Nature has supplied them with a great source of wealth, if they can only be taught to utilize it. While the weather conditions and market conditions are not so favorable as might be desired, yet the difficulties do not seem insurmountable.

17. That cold-storage cellars, for the purpose of preserving animal food, be dug in certain places as follows: Point Hope, Kotzebue, Wales, St. Lawrence Island, Sinuk, Igloo, and one place on the Yukon to be selected. This will prevent shortage of food at certain times of the year such as has heretofore existed. And it will also, if proper instruction is given, largely put a stop to the eating of decaying meats.

18. That combined workshops and washhouses be erected at Kotzebue, Wales, Unalakleet, St. Michael, and St. Lawrence Island, in which the natives may carry on those manual arts during the winter time for which large space is needed, and in which also the women may heat water and do their family washing. These houses should be properly equipped so that the men may build boats and sleds, put together parts of houses, and saw and polish ivory. The washhouses

should be equipped with stoves, tanks for heating water, washtubs, and washboards.

19. That small hospitals be erected at Barrow, Kotzebue, St. Michael, Bethel, and at some place in the region of Cook Inlet; that larger hospitals in which natives may be trained as nurses be erected at Wales and at some point in the southern part of the Alexander Archipelago; that portable hospitals be erected at Tatitlek and Yakutat. These hospitals should be fully equipped with a few beds and with such surgical instruments and medical supplies as are needed in the various regions in which they would be located. They should be furnished with such drugs as would be used in securing proper sanitation, and if possible provision should be made so as to segregate those natives afflicted with contagious diseases. These hospitals should also be furnished with food for the relief of destitution.

Each hospital should be in charge of a licensed practitioner and a competent trained nurse. The physician should be required to make visitations to neighboring villages for the purpose of attending the sick and of securing and maintaining proper sanitation in the villages.

20. That contracts be entered into with reputable practicing physicians and hospitals, when such exist, in those regions not tributary to the hospitals under this division, whenever it appears that there is need for their services and suitable terms can be arranged.

21. That the War Department be relieved from issuing rations and medicines to destitute natives. By reason of the large expansion in the Alaska School Service during the past few years, representatives of this division are located in almost all of the native villages in which it is practicable to maintain schools. As the question of relief of the natives is so intimately associated with that of their future advancement, it would be highly advantageous if the entire administration of such relief could be confined exclusively to the agents of the Bureau.

THE ALASKA REINDEER SERVICE.

Until 1890 no representative of the Bureau of Education had visited the settlements of Eskimos on the shores of Bering Sea and the Arctic Ocean. In 1885 the first United States public schools had been opened in southeast Alaska and the school system had gradually extended westward as far as the Aleutian Islands. But the region north of the Aleutian Islands was a terra incognita to all except a few whalers, traders, and the officers and the men of the revenue cutter which during the short season of open navigation in midsummer cruised along its barren coast.

In the summer of 1889 the U. S. S. *Thetis*, under the command of Captain Stockton, made a cruise along the Alaskan and Siberian shores as far as Point Barrow. During the following winter Captain Stockton urged upon the Commissioner of Education the need of establishing public schools in the large Eskimo villages of northwestern Alaska which he had visited.

Accordingly, with this in view, by the permission of the Secretary of the Treasury, during the summer of 1890, Dr. Sheldon Jackson, United States general agent of education in Alaska, accompanied the revenue cutter *Bear*, Capt. Michael A. Healy, commanding, in its annual cruise in Bering Sea and the Arctic Ocean, visiting all the important villages on both the Alaskan and Siberian shores.

The Alaskan Eskimos were found eking out a precarious existence upon the few whale, seal, and walrus that they could catch. Across Bering Strait, in Siberia, but a few miles from Alaska, with climate and country precisely similar, were tens of thousands of tame reindeer supporting thousands of natives. The flesh and milk of the reindeer furnished food, its skin provided clothing, bedding, and shelter, and in winter the reindeer made possible rapid communication between the scattered villages.

Both Doctor Jackson and Captain Healy were impressed with the fact that it would be wise national policy to introduce domestic reindeer from Siberia into Alaska, and by establishing reindeer raising as an industry in connection with the schools maintained by the Bureau of Education afford the Alaskan Eskimos an assured means of support and in the course of time advance them from nomadic fishermen and hunters to the position of civilized, wealth-producing factors in the development of northern Alaska.

Upon his return to Washington in September, 1890, Doctor Jackson brought the matter to the attention of the Commissioner of Education, Dr. W. T. Harris, who at once indorsed the project and gave it his enthusiastic support. Pending the securing of a Congressional appropriation for the support of the enterprise, an appeal was made to benevolent individuals for a preliminary sum in order that the experiment might be commenced at once. With $2,146 thus secured, 16 deer, which never entered into the reindeer industry, were purchased in 1891, and 171 in 1892.

In 1893 Congress realized the importance of the movement and made the first appropriation of $6,000 for the work of importing reindeer from Siberia into Alaska. It has continued its support ever since by annual appropriations ranging from $6,000 to $25,000. (Table 2, Congressional appropriations. Reindeer for Alaska, 1894 to 1908.)

During nine seasons the revenue cutter *Bear* carried the agents of the Bureau of Education back and forth between Siberia and Alaska

and transported Siberian reindeer to Alaska. The work was exacting in the extreme, involving cruises along hundreds of miles of fog-ridden, ice-beleaguered, uncharted coast; long delays in dangerous waters; patient bargaining in sign language with uncouth, uncivilized Siberians; tedious payment for the reindeer in barter goods; hard work in transporting deer in the *Bear's* boats from shore to ship; discomfort on board while on the way to Alaska, and much labor in landing the deer on the Alaskan side. The total number of deer thus imported into Alaska from 1892 to 1902, when the Russian Government withdrew its permit, was 1,280. (Table 5, Reindeer imported from Siberia, 1892–1902.) To Capt. Michael A. Healy, to Capt. Francis Tuttle, and to other officers and men of the Revenue-Cutter Service, who during those years so willingly gave their time and labor, the success of the importation is largely due.

At the commencement of the enterprise Port Clarence, on the Seward Peninsula, Alaska, the nearest harbor to northeast Siberia, was selected as the receiving point for the reindeer brought over season after season. As the work grew Teller Reindeer Station, on Port Clarence, became the base of supply from which winter after winter herds were sent out over northern Alaska to establish new centers of the reindeer industry. From this starting point the reindeer enterprise gradually extended until at the present time it includes sixteen stations. Its northernmost limit is Point Barrow, on the Arctic Ocean; its southernmost extremity is at Iliamna, near the shores of the North Pacific Ocean; its easternmost limit is at Tanana, on the Yukon River, in the center of Alaska.

In order to distribute the reindeer among the Eskimos the Bureau of Education early in the history of the enterprise adopted the plan of loaning small herds of reindeer, usually 100 in number (25 males and 75 females), to mission stations for a specified period, usually five years, as an equipment for the industrial training of the Eskimo. Upon receiving the loan each mission agreed to train a corps of Eskimo apprentices in the care and management of reindeer and to support them during their term of apprenticeship. At the end of the specified period the mission station repaid the loan by returning to the Government an equal number of young deer in the same proportion of males and females as the original loan (25 males and 75 females), the mission retaining the increase that had accumulated during the term of the loan.

This method of distribution and support has hitherto been followed at all the reindeer stations except those at Barrow, Gambell, and Iliamna, where the Government itself has supported the Eskimo boys during their apprenticeship.

At each station promising and ambitious Eskimo young men are selected by the local superintendent as apprentices in the reindeer

service. During the fifteen years that the reindeer enterprise has been in existence the length of the term of service of the apprentices and the number of reindeer awarded have varied.

With the experience gained during the fifteen years of the existence of the reindeer enterprise a code of rules and regulations for the Alaska reindeer service was prepared, which received the approval of the Secretary of the Interior on June 10, and went into effect July 1, 1907. According to these rules and regulations the term of apprenticeship is four years. At the end of the first year of his apprenticeship each apprentice whose work is approved by the local superintendent receives 6 reindeer (4 females and 2 males); at the end of the second year of his apprenticeship, 8 reindeer (5 females and 3 males); at the end of the third year of his apprenticeship, 10 reindeer (6 females and 4 males), and at the end of the fourth year of his apprenticeship, 10 reindeer (6 females and 4 males). With the approval of the local superintendent of his station an apprentice may kill his surplus male deer and sell the meat for food and the skin for clothing. He is encouraged to use his sled deer in carrying mails, passengers, and freight.

Upon the satisfactory termination of his contract of apprenticeship an apprentice becomes a herder and assumes entire charge of his herd, subject to the rules and regulations for the reindeer service. The herder must then in turn train and reward apprentices in accordance with the provisions of the rules and regulations, and thus become an additional factor in the extension of the enterprise.

Under no circumstances is an apprentice or herder permitted to sell female reindeer except to the Government or, with the written approval of the superintendent, to another native inhabitant of Alaska. The native purchasing the reindeer then becomes subject to the rules and regulations regarding the reindeer service. The prohibition of the sale of female reindeer to white men has been adopted in order to insure the reindeer industry remaining in the hands of the natives until there is a sufficient number of reindeer in northern Alaska to furnish a permanent means of support to the native population of that region.

The rules and regulations provide that the general supervision of the reindeer herds shall be included in the duties of the district superintendent of schools in northern Alaska, each herd being under the immediate supervision of the teacher of the local United States public school, except as otherwise provided by special appointment or contract. The duties of the district superintendent and of local superintendents, apprentices, and herders are enumerated and defined.

The purpose underlying these rules and regulations is the general distribution of reindeer among the natives of Alaska as rapidly as the natives can be trained to care for and use the deer, and the establish-

ment of the reindeer enterprise upon a self-supporting basis as far as the conditions of the market for reindeer products will permit. Under the present plan it is possible for natives to acquire deer by purchase as well as by service as apprentices at reindeer stations on condition that the purchaser make proper provision for the care of his reindeer.

Forms of contract have been prepared for use in turning over reindeer to missions in Alaska, in accordance with the provisions of the act of March 4, 1907 (34 Stat. L., p. 1338), such reindeer to be held in trust for distribution among the natives of Alaska. These contracts provide that the net income derived by mission societies from the reindeer enterprise shall be devoted to the support of apprentices in the reindeer industry.

Forms of agreement, to be signed by natives of Alaska upon entering the reindeer service as apprentices and by trained herders upon satisfactorily completing the four years of apprenticeship, have also been prepared.

In order to enable the local superintendents to keep complete and systematic record of affairs at the reindeer stations in Alaska, blank forms have been prepared for their use showing the number and ownership of the reindeer, the efficiency of the apprentices and herders, and receipts and expenditures in connection with each station. Other forms have been prepared for the use of local superintendents and natives throughout the year in keeping a record of supplies received and issued at the station and all cash receipts and disbursements, and for the making of the prescribed annual reports.

During the fiscal year 1906–7 the scope of the reindeer service was extended by the establishment of a station at Icy Cape. The number of Eskimo owners of reindeer increased from 97 to 114.

The total number of reindeer in Alaska June 30, 1907, was 15,839, and the percentages of ownership as follows: Eskimo reindeer herders and apprentices, 41; United States Government, 23; mission stations, 22; Lapp instructors in herding, 14.

TABLE 1.—*Expenditure of appropriation, Reindeer for Alaska, 1907.*

Amount appropriated	$9,000.00
Supplies	6,457.32
Establishing new herds	40.40
Printing	1,171.87
Transportation and freight	723.50
Balance	606.91
Total	9,000.00

TABLE 2.—*Congressional appropriations for the introduction of domestic reindeer into Alaska from Siberia from the inception of the enterprise until 1908.*

Year.	Amount.	Year.	Amount.
1894	$6,000	1903	$25,000
1895	7,500	1904	25,000
1896	7,500	1905	25,000
1897	12,000	1906	15,000
1898	12,000	1907	9,000
1899	12,500	1908	9,000
1900	25,000		
1901	25,000	Total	240,500
1902	25,000		

TABLE 3.—*Reindeer loaned to missions and Laplanders.*

Station.	Number loaned.	When loaned.	Expiration of loan.
Bahr, O. O. (Unalakleet)	100	July 1,1901	June 30,1906
Bals, N. P. (Eaton)	100	Mar., 1906	Mar., 1911
Bals, P. N. (Eaton)	100	Mar., 1906	Mar., 1911
Bango, I. (Tanana)	100	Mar., 1906	Mar., 1911
Bethel (Moravian)	176	Feb. 26,1901	Feb. 26,1906
Deering (Friends)	100	Jan. 18,1905	Jan. 18,1910
Golofnin (Swedish Lutheran)	50	Jan. 16,1896	Jan. 16,1899
Klemetsen, N. (Golofnin)	100	July 1,1902	June 30,1907
Kotzebue (Friends)	95	Sept. 2,1901	Sept. 2,1906
Nilima, A. S. (Kotzebue)	99	July, 1901	June 30,1906
Nulato (Roman Catholic) [a]	100	Mar., 1901	Mar., 1906
Sara, N. P. (Bethel)	100	July, 1901	June 30,1906
Spein, P. M. (Bethel)	100	July, 1901	June 30,1906
Tanana (Episcopal)	100	Mar., 1906	Mar., 1911
Teller (Norwegian Lutheran)	100	Sept. 1,1900	Sept. 1,1905
Unalakleet (Swedish Lutheran)	100	July 1,1903	June 30,1908
Wales (Congregational)	118	Aug., 1894	Transfer.

[a] In December, 1905, this herd was transferred to the Roman Catholic Mission at Koserefsky.

TABLE 4.—*Total number of deer in Alaska, 1907.*

Station.	Adults.			Fawns.			Total.
	Male.	Female.	Total.	Male.	Female.	Total.	
Barrow	127	264	391	77	88	165	556
Icy Cape	.....	.....	[a] 325	.....	.....	[a] 125	[a] 450
Kivalina	72	174	246	53	53	106	352
Kotzebue	.....	.....	[a] 850	.....	.....	343	[a] 1,193
Deering	194	401	595	129	121	250	845
Shishmaref	245	437	682	138	110	248	930
Wales	285	592	877	192	192	384	1,261
Gambell	74	144	218	53	60	113	331
Teller	380	678	1,058	235	206	441	1,499
Golofnin	424	842	1,266	277	249	526	1,792
Unalakleet	320	349	669	138	124	262	931
Eaton	737	948	1,685	287	265	552	2,237
Bethel	.....	.....	[a] 1,454	.....	.....	[a] 646	[a] 2,100
Iliamna	230	191	421	69	71	140	561
Koserefsky	80	155	235	60	40	100	335
Tanana	112	236	348	70	48	118	466
Total	3,280	5,411	11,320	1,778	1,627	4,519	15,839

[a] No complete report received; number estimated.

TABLE 5.—*Annual increase and decrease of reindeer.*

Year.	Balance from previous year.	Fawns surviving.	Imported from Siberia.	Butchered or died.	Total in herd June 30.	Per cent of annual increase.	
						By fawns.	Net (since importation ceased).
1892	.....	.....	171	28	143	.....	.....
1893	143	79	124	23	323	55	.....
1894	323	145	120	96	492	45	.....
1895	492	276	123	148	743	56	.....
1896	743	357	.....	100	1,000	48	.....
1897	1,000	466	.....	[a] 334	1,132	46	.....
1898	1,132	625	161	185	1,733	55	.....
1899	1,733	638	322	299	2,394	37	.....
1900	2,394	756	29	487	2,692	32	.....
1901	2,692	1,110	200	538	3,464	41	.....
1902	3,464	1,654	30	353	4,795	48	.....
1903	4,795	1,877	.....	390	6,282	39	31
1904	6,282	2,284	.....	377	8,189	36	30
1905	8,189	2,978	.....	926	10 241	36	25
1906	10,241	3,717	.....	1,130	12,828	36	25
1907	12,828	4,519	.....	1,508	15,839	35	23
Total	.....	21,481	1,280	6,922	15,839	Av. 38	Av. 26

[a] 246 killed in Barrow relief expedition.

The average per cent of annual increase by fawns for the entire period, 38 per cent, is obtained by dividing the total of the column headed "Fawns surviving" by 56,451, the total of the column "Balance from previous year." The average per cent of the annual net increase since importation ceased is obtained by subtracting the total of the last five items in the column headed "Balance from previous year" from the total of the last five items of the column headed "Total in herd June 30," and by dividing this amount by the first total. These figures indicate that if no exceptional circumstances develop the reindeer herds may be expected to have a gross increase of at least 35 per cent each year and to have a net increase of from 20 to 25 per cent each year. It is more probable that the net increase will approximate the lower percentage by reason of the fact that a greater number of reindeer will probably be butchered in the future for food and clothing and for market. With a gross increase of 20 per cent each year the total number of reindeer in the herds should more than double with every four-year period.

TABLE 6.—*Reindeer statistics, 1907.*

	1	2	3	4	5	6
Station	Teller.	Wales.	Golofnin.	Unalakleet.	Barrow.	Gambell.
Established	1892.	1894.	1896.	1897.	1898.	1900.
Lapp herders	.....	.....	1	1	.....	.....
Native herders and independent owners	7	8	[a] 9	3	[b] 1	2
Government's apprentices	.....	.....	.....	.....	[c] 9	4
Mission's apprentices	3	2	4	.....	.....	.....
Lapps' apprentices	.....	.....	2	2	.....	.....
Herders' apprentices	6	5	3	3	.....	.....
Total apprentices	9	7	9	5	9	4
Deer owned by Government	467	322	67	104	80	182
Deer loaned by Government	.....	.....	100	.....	.....	.....
Deer owned by Government's apprentices	.....	.....	.....	.....	462	26
Deer owned by Mission	415	369	668	.....	.....	.....
Deer owned by Mission's apprentices	[d]	33	59	.....	.....	.....
Deer owned by Lapps	.....	.....	356	340	.....	.....
Deer owned by Lapps' apprentices	.....	.....	12	40	.....	.....
Deer owned by herders	598	513	509	375	14	123
Deer owned by herders' apprentices	[d] 14	24	21	72	.....	.....
Total deer	[e] 1,499	1,261	1,792	931	556	331
Total number Eskimos owning deer	8	11	16	8	10	6
Total number deer owned by Eskimos	612	570	601	487	476	149
Sled deer, trained	41	30	[f]	50	24	32
Sled deer, partially trained	12	10	[f]	.....	4	.....
Receipts—sale of meat, etc.:						
Mission	$595.00	$695.00	[f]	[f]	.....	.....
Lapps	.....	.....	[f]	[f]	.....	.....
Eskimos	2,461.00	1,076.00	[f]	[f]	.....	.....
Total	3,056.00	1,771.00	[f]	[f]	.....	.....

	7	8	9	10	11	12
Station	Bethel.	Kotzebue.	Koserefsky.	Eaton.	Kivalina.	Deering.
Established	1901.	1901.	1901.	1902.	1905.	1905.
Lapp herders	2	1	[g] 1	1	.....	.....
Native herders and independent owners	2	.....	.....	5	4	5
Government's apprentices	.....	.....	.....	.....	.....	.....
Mission's apprentices	[h] 6	5	[i]	3	.....	4
Lapps' apprentices	[h] 2	1	.....	.....	.....	.....
Herders' apprentices	.....	.....	.....	2	4	1
Total apprentices	[h] 8	6	[i]	5	4	5
Deer owned by Government	.....	.....	.....	531	.....	.....
Deer loaned by Government	[j] 376	[j] 194	[j] 100	300	.....	100
Deer owned by Government's apprentices	.....	.....	.....	.....	.....	.....
Deer owned by Mission	664	[h] 394	235	349	.....	93
Deer owned by Mission's apprentices	56	[h] 80	.....	64	.....	54
Deer owned by Lapps	[h] 819	[h] 521	.....	[k] 176	.....	.....
Deer owned by Lapps' apprentices	[h] 8	[h] 4	.....	.....	.....	.....
Deer owned by herders	177	.....	.....	718	334	592
Deer owned by herders' apprentices	.....	.....	.....	97	18	6
Total deer	[h] 2,100	[h] 1,193	335	[l] 2,237	352	845
Total number Eskimos owning deer	[h] 8	6	.....	10	8	10
Total number deer owned by Eskimos	[h] 241	84	.....	879	352	652
Sled deer, trained	[h] 87	21	4	27	1	20
Sled deer, partially trained	[f]	.....	.....	23	.....	8
Receipts—sale of meat, etc.:						
Mission	[f]	[f]	.....	[f]	.....	$200.00
Lapps	[f]	[f]	.....	[f]	.....	.....
Eskimos	[f]	[f]	.....	[f]	$967.00	1,248.50
Total	[f]	[f]	.....	[f]	967.00	1,448.50

[a] One of these is the wife of an apprentice who died (42 deer), and 2 are women who own 12 and 1 deer.
[b] A half-breed who purchased deer.
[c] One of these is the wife of an apprentice who died (49 deer).
[d] Apprentices do not receive deer at this station until they have completed their terms.
[e] Five unidentified.
[f] Not reported.
[g] Owns deer in Eaton herd.
[h] Estimated. No complete report received.
[i] School boys have taken turns in caring for the herd.
[j] These loans have expired, but the Government has not yet made arrangements for their return.
[k] Owned by P. & N. Bals, who are respectively in charge of the herds at Eaton and Koserefsky (see [g].)
[l] A white man owns 2 sled deer.

TABLE 6.—*Reindeer statistics, 1907*—Continued.

	13	14	15	16	Total.
Station	Iliamna.	Tanana.	Shishmaref.	Icy Cape.	
Established	1905.	1905.	1905.	1906.	
Lapp herders	[a] 2	1			[b] 10
Native herders and independent owners		3	6	2	[c] 57
Government's apprentices	4				17
Mission's apprentices			1		28
Lapps' apprentices					7
Herders' apprentices			3	[d]	27
Total apprentices	4		4	[d]	79
Deer owned by Government	561				2,314
Deer loaned by Government		[e] 200			1,370
Deer owned by Government's apprentices					488
Deer owned by Mission		[e]	283		3,470
Deer owned by Mission's apprentices			14		360
Deer owned by Lapps		73			2,285
Deer owned by Lapps' apprentices					64
Deer owned by herders		206	619	[f] 450	5,228
Deer owned by herders' apprentices			14	[d]	266
Total deer	561	[e] 466	930	[f] 450	[g] 15,839
Total number Eskimos owning deer		3	8	2	114
Total number deer owned by Eskimos		206	647	[f] 450	6,406
Sled deer, trained	50	20	38	[d]	445
Sled deer, partially trained	12		8	[d]	77
Receipts—sale of meat, etc.:					
Mission		$130.10	$9.00	[d]	$1,629.10
Lapps		151.00		[d]	151.00
Eskimos		451.70	1,579.00	[d]	7,783.20
Total		732.80	1,588.00	[d]	9,563.30

[a] Own no deer. [c] Seventeen of these are natives who have inherited or purchased deer.
[b] Eight own deer. [d] Not reported.
[e] The loan of 100 made to the mission is not due until 1911. The mission has either given out more than the increase of its loan, or a large proportion have died. This year only 87 were reported as belonging to the mission. As the Government loaned 100, the mission at present really owns minus 13.
[f] Estimated. No complete report received.
[g] This total is not the footing of the vertical column. To the footing of the vertical column, 7 should be added (see Notes *e* and *l* on p. 403) and 13 subtracted (see Note *e*).

TABLE 7.—*Table showing distribution of reindeer herds among different classes of owners according to their size.*

Size of herds.	Mission.	Lapp.	Government.	Natives.			
				Apprentices.	Herders.	Owners.	Total native.
1 to 9				12		6	18
10 to 19				15		5	20
20 to 29				6	2	1	9
30 to 39				6	[a] 7		13
40 to 49				2	2	2	6
50 to 59				[b] 1	1		2
60 to 69					[c] 7	1	8
70 to 79		1		[b] 3	[c] 3	1	7
80 to 89		1	1				
90 to 99	1	1		[b] 1	2		3
100 to 199			6		6		6
200 to 299	2		1		3		3
300 to 399	3	2	2		1		1
400 to 499	1	2			1		1
500 to 599		1	1		1		1
600 to 699	2						
700 to 799							
800 to 899			1				
	[d] 9	8	12	[e] 46	[f] 36	16	[f] 98

[a] Two of these represent heirs of one herder.
[b] Because of no market, it has been found necessary for the Government to support all natives engaged in the reindeer service at Barrow. The owners of these large herds are for this reason considered apprentices.
[c] Three natives were given 50 reindeer each at the beginning of their apprenticeship in 1905. They are self-supporting.
[d] Station at Tanana not included, because it does not have in its possession a number of deer equivalent to the original loan.
[e] Six apprentices from Kotzebue and eight from Bethel not included, because of incomplete reports.
[f] Two herders at Kivalina not included, because of incomplete reports. One owns approximately 125 and the other 325 reindeer.

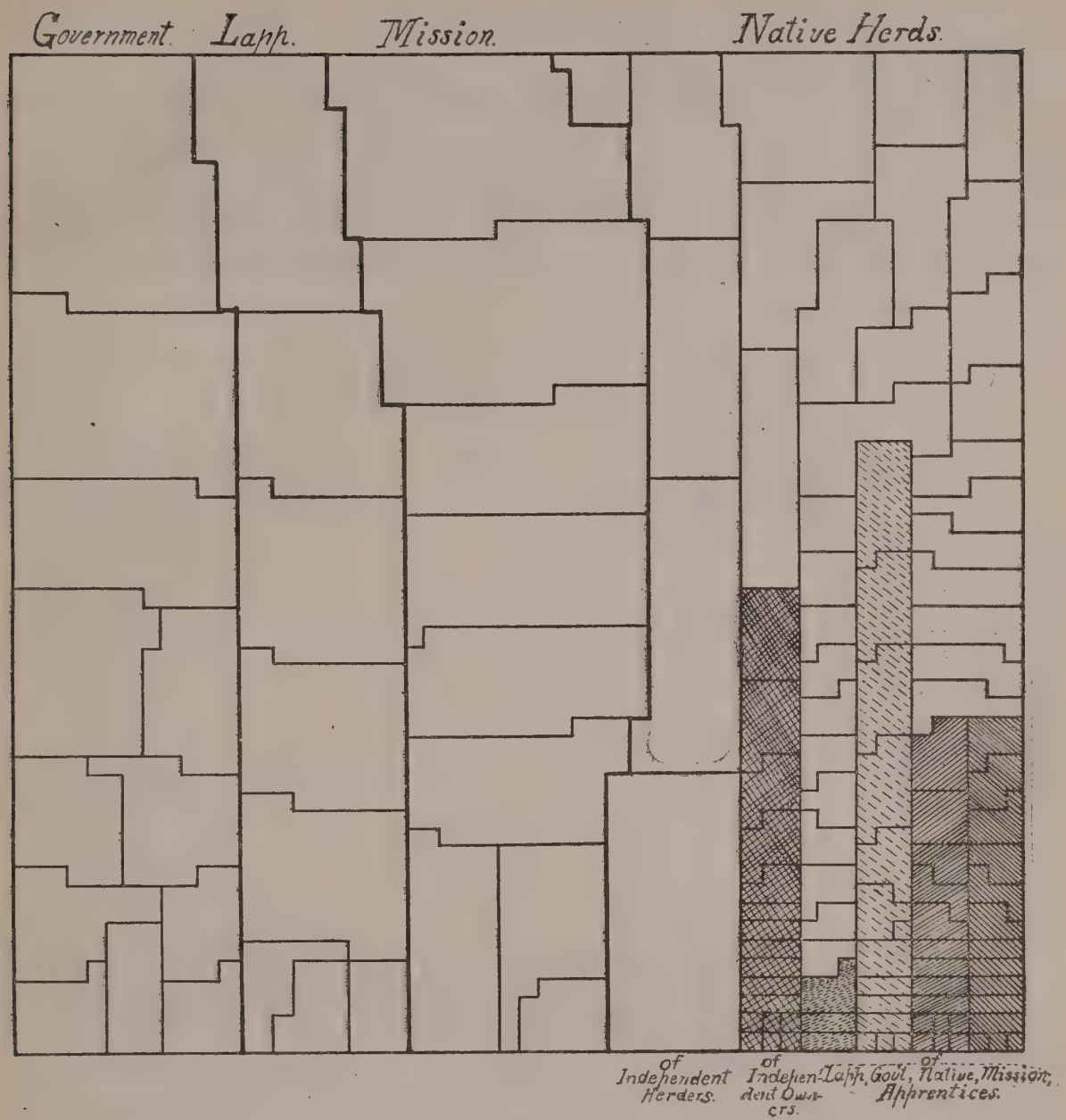

DIAGRAM 3.—Distribution and size of herds.

This diagram, based in part on Table 7, has been prepared for the purpose of showing the distribution of all the reindeer in the Alaska reindeer service up to June 30, 1907, except a few which could not be included because of incomplete returns. Each space represents a herd, native, mission, Lapp, or Government, and the size of the space indicates the relative number of reindeer belonging to each herd. A small square, several of which appear on the bottom line of the diagram, represents 5 reindeer, the approximate average of all the herds ranging from 1 to 9 in size, and is the unit used in making the diagram. The herds of each class are grouped together. Native herds are arranged in subgroups—those of independent herders, native owners (those who have acquired reindeer by purchase and not through an apprenticeship), and apprentices. The subgroup of herds of apprentices is again divided into four parts, according to the sources from which the apprentices receive their maintenance, as follows: Native, mission, Lapp, and Government apprentice herds. These four differ-

ent classes of apprentice herds and the herds of the native owners are indicated by different shadings.

This diagram indicates the comparatively small number of apprentices and the comparatively small number of deer being awarded to apprentices by the missions, the Lapps, and the Government. It also reveals, in connection with the table, the large number of natives that have acquired deer by purchase and the comparatively large size of some of their herds.

TABLE 8.—*Proportions of full quotas of apprentices maintained and the percentages of the entire number of owners in each proportion.*

Proportion of quota.	Mission.		Lapps.		Government.		Native herders.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
None	1	11	3	38	.....	.....	4	11
0.01—.09	.....	.....	.....	.....	.....	.....	.....	.....
0.10—.19	1	11	.....	.....	.....	.....	.....	.....
0.20—.29	1	11	.....	.....	.....	.....	.....	.....
0.30—.39	2	22	3	37	1	33	2	6
0.40—.49	2	22	.....	.....	.....	.....	.....	.....
0.50—.59	.....	.....	.....	.....	.....	.....	2	6
0.60—.69	1	11	2	25	.....	.....	1	3
0.70—.79	.....	.....	.....	.....	.....	.....	.....	.....
0.80—.89	.....	.....	.....	.....	.....	.....	.....	.....
0.90—.99	.....	.....	.....	.....	.....	.....	.....	.....
Full quota	.....	.....	.....	.....	1	33	19	54
Above quota	1	11	.....	.....	1	34	7	20
Total	9	100	8	100	3	100	35	100

The diagram on page 407 shows the percentages of the various classes of owners of reindeer herds maintaining the different proportions of the full quotas of apprentices which under normal conditions they would be expected to support. It represents graphically the percentages presented in Table 8. These figures were obtained in the following manner:

Lists containing the number of reindeer and the number of apprentices supported in each individual herd were first prepared. The full quota of the apprentices for each herd was next obtained by assigning one apprentice for every 50 reindeer in the Government and mission herds, and one apprentice for every herd containing from 75 to 150 reindeer, two apprentices for every 150 to 200 reindeer, and three apprentices for every 200 to 250 reindeer in the cases of the Lapps and the independent native herders. The proportion of the number of apprentices of the full quota was then obtained in hundredths. These proportions were assembled in groups of ten hundredths each, as shown in the table. The percentage of the herds belonging in each group of the entire number of herds in its class—native, mission, Lapp, Government—was obtained in the usual manner.

In this table and in its accompanying diagram only the Government deer at distinctly Government stations, where Government apprentices are maintained, are shown. There were on June 30, 1907, 1,500 reindeer belonging to the Government which were not being actively

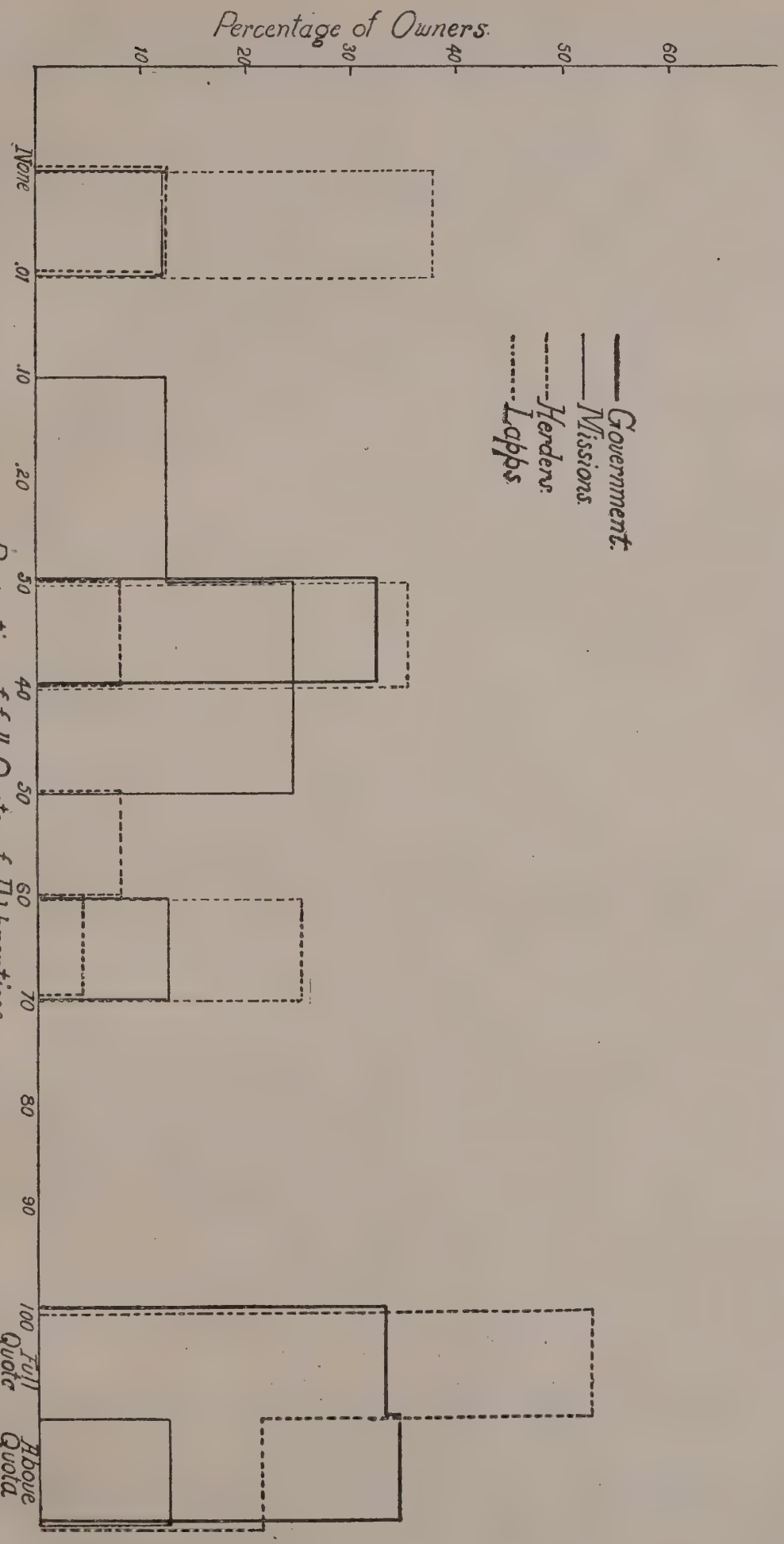

DIAGRAM 4.—Comparative percentages of different classes of owners maintaining various proportions of full quotas of apprentices.

employed in the reindeer service. The mission station at Tanana is not included, because it has loaned out the deer loaned to it by the Government, and has required the natives to whom the loans were made to support themselves.

These figures indicate that the native herders are doing more in proportion to what would be expected of them than any other class of herders. Steps have already been taken which will enable the Government to rise almost to the full standard of efficiency in its service during the coming fiscal year, and it is earnestly hoped that a way may be found whereby the missionary societies and the Lapps may support a larger number of apprentices.

It should not be lost sight of, however, that not all the natives are doing their full duty. In fact some of those that are most able to assist their fellows have the lowest records.

Diagram 5 indicates clearly two groups of native herders.[a] (1) Those who have been herders five years or less, and (2) those who have been herders from six to nine years inclusive. It is evident that the latter group has made much more favorable progress than the former. In the first group, composed of 19, only one herder has over 100 reindeer, and the median or middle herd in the distribution numbers 50. The second group is composed of 13 herds, two of which are less than 100 in size. The median herd contains 191 reindeer. Assuming that the herds in the first group will double in the next four years, which is the most liberal estimate that can be made in view of the fact that the herders are self-supporting, the median herd will then be about 100. Thus the herders in the second group, taken as a class, are almost two times better off now than the herders of the first group will be four years hence, when they will have served the same length of time as the herders of the second group have now served.

These herders of the first group are, furthermore, at a greater disadvantage now than the present apprentices will be when they reach the same point of service, by reason of the fact that under the new rules and regulations and with the establishment of new Government stations, the apprentices, as a class, will henceforth receive more reindeer, and so will secure a larger increase.

These facts establish the wisdom of the policy of aiding those native herders who have few deer and who are in need, whenever it is practicable to do so.

I would respectfully make the following recommendations for the promotion of the Alaska reindeer service:

1. That the reindeer belonging to the Government which are not actually needed for the conduct of the stations at which they are located be removed and utilized in the establishment of new stations.

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[a] This diagram does not include two herds, both of which have existed over ten years. They are approximately 125 and 325 reindeer in size. One of the herds contains 67 reindeer, descended by inheritance to two owners in common.

The rules and regulations approved June 10, 1907, have established a more rapid distribution to those natives who are taken into the reindeer service at the Government stations. This recommendation has as

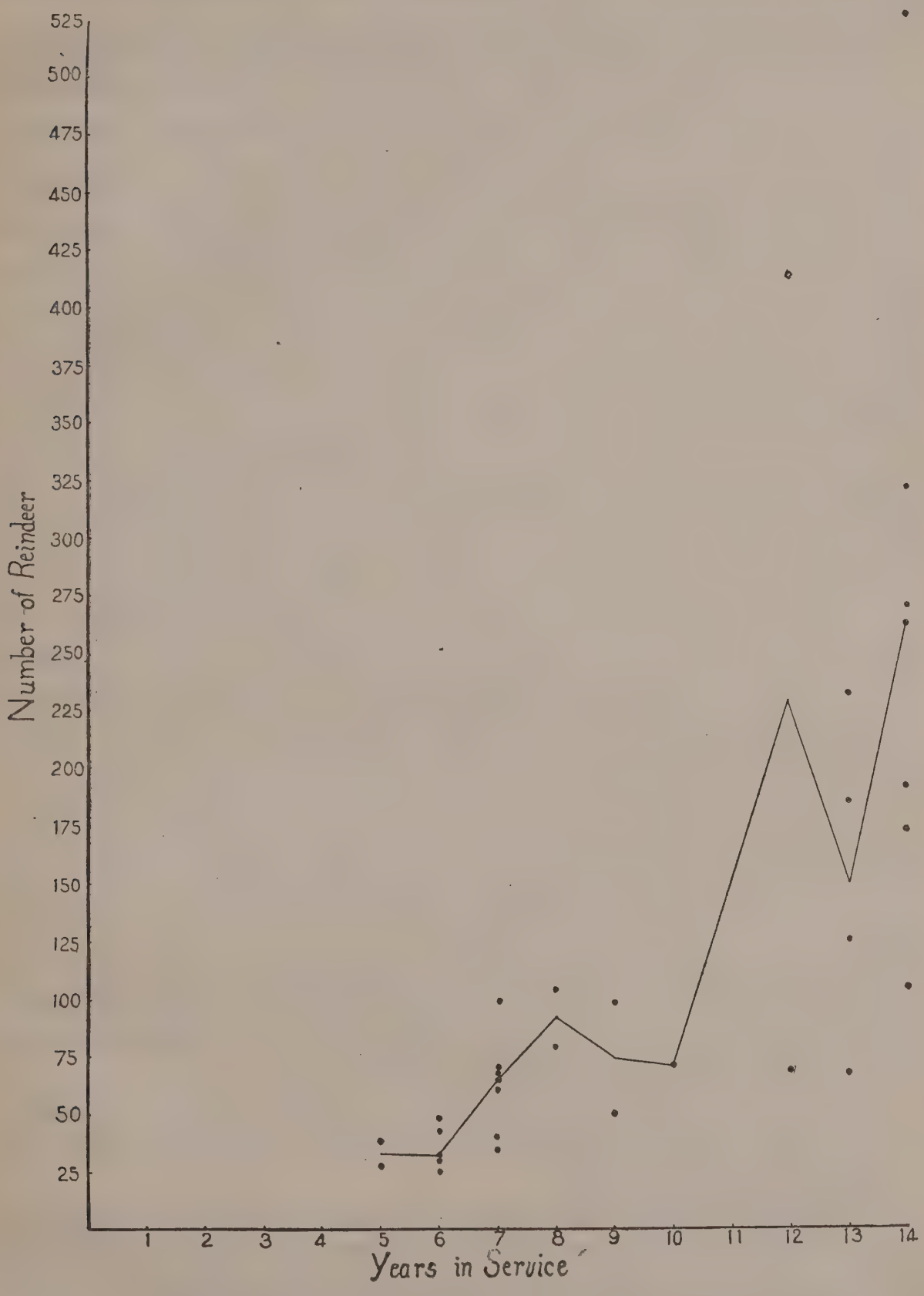

DIAGRAM 5.—Relation of years of service to size of herds of native herders.

its object a distribution among a larger number of natives and over a wider range of territory. It is part of a more general aim, namely, to spread the benefits of the Alaska reindeer service over the greatest

possible range of territory and to the largest number of natives as rapidly as the increase in the reindeer belonging to the Government will permit. A substantial income from the reindeer industry in a large number of villages will greatly promote the general advancement of the natives in civilization.

2. That new agreements be entered into with the various missionary societies in order to secure a distribution of reindeer among the natives of Alaska commensurate with the size of the herds under their control.

It is believed that helpful relations may be established and maintained between the representatives of the Bureau of Education and the representatives of the missionary societies in charge of reindeer stations in Alaska, to the end that the latter may be enabled to make the most of the industry that the Government has placed in their hands. The missionaries, as a rule, are not yet skilled in the reindeer business; their superiors are not acquainted with the enterprise except in a general way, and so the missionary can receive no detailed instructions from his society as to methods of managing the herd. Government supervision, having hitherto been chiefly confined to the annual tour of inspection, has been necessarily very limited, and, in consequence, the missionary has not been able to obtain the assistance that might be derived from thoroughly organized, careful, and detailed supervision. Distances between herds are great and intercommunication difficult, the regular duties of the missionaries are numerous and pressing, and so they can learn little or nothing by interchange of experiences with one another, and for the same reasons they have not yet developed markets for the sale of reindeer products. In consequence, each herd has been administered, to a large extent, independently and in accordance with the ideas of the missionary in charge for the time being, instead of as an integral part of a uniform whole.

While the management of the different herds has varied in effectiveness, up to the present time it has not, taken as a whole, produced such results as can undoubtedly be accomplished when the enterprise is more thoroughly systematized.

I propose, accordingly, that an effort be made to secure an agreement with each missionary society which will contain the following provisions:

(1) That the missionary society will administer its herd in accordance with the rules and regulations and under the supervision of the Government superintendent of schools; (2) that the herd be limited in size and be made to render a full return from its increase by sale of reindeer and reindeer products, in which sale the Government superintendent will render his assistance; (3) that the missionary society receive a fixed per cent of the net income from the herd, to be

used for the benefit of the natives as it may deem best; (4) that the society maintain the number of apprentices specified annually by the Government superintendent, and (5) that the Government reimburse the missionary society for whatever excess of expense the maintenance of the number of apprentices stipulated by the superintendent causes above its share of the returns from the sale of reindeer products.

This arrangement seems to me not only fair to the missionary society and to the Government, but also of very great benefit to the natives, for whose welfare both parties are laboring. It insures for the missionary society a steady income, greater in all probability in amount than that which is now derived from the reindeer, and enables it to do far more efficient work in the promotion of the welfare of the natives, with comparatively small increase of labor on the part of the missionary in charge. It secures for the Government a more rapid achievement of some of its aims in the promotion of the welfare of the Alaska natives.

3. That the independent owners and herders be urged to maintain the number of apprentices required by the rules and regulations of those who are now finishing their apprenticeship. It has been expected from the beginning that those who were first benefited by this undertaking of the Government should pass its benefits on to others. The primary social obligation of assistance to fellow-men which is so prominent a characteristic of the Eskimo should not be permitted to die out by lack of exercise in the reindeer service. If this subject is presented tactfully to the herders, no difficulty should be experienced in securing this end.

4. That when a fawning season has intervened between the time of an expiration of a loan and the time of the return of the same to the Government, the district superintendent be instructed to receive, in addition to the original number loaned, the increase thereof during the intervening time less a sufficient number of reindeer to afford a reasonable compensation for the care of the loan and its increase, said increase to be computed upon the basis of the total increase of the herd by fawns in each of the intervening fawning seasons.

Respectfully submitted.

HARLAN UPDEGRAFF,
Chief of Alaska Division.

The COMMISSIONER OF EDUCATION.

39847—ED 1907—VOL 1——27

CHAPTER XVI.

CURRENT TOPICS.

CONTENTS.

Compulsory attendance and child-labor laws.
Coeducation of the sexes.
Status of city teachers in Connecticut.
Certain educational movements in cities:
  Industrial education in city schools.
  Medical inspection of school children.
  High school fraternities.
  Education of the deaf in day schools.
Fourth Conference of Summer Camps for Boys.
New educational associations.
Gifts for education.
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Statistics of elementary education in foreign countries.

COMPULSORY ATTENDANCE AND CHILD LABOR LAWS.

It will be seen from the following tabulation that compulsory attendance laws are now in force in 37 States and Territories. In addition to that number, Maryland and Tennessee have compulsory laws whose operation is limited to certain localities, and North Carolina has a law the adoption of the provisions of which is optional with counties.

Attendance is now required in 26 States for the entire annual school term; that is, children subject to the compulsory law are required to attend whenever the schools are in session. In 2 of these States, however—Pennsylvania and South Dakota—this period may be shortened by the local school authorities. In addition to these 26 States, attendance is required the full school term in all or certain classes of cities in Kentucky, Nebraska, and Wisconsin.

No attempt has been made in the table to note the provisions regulating the hours of labor of minors. Such regulations are now very general.

Many States, in general terms, forbid, or permit only under restrictions, occupations dangerous to the life, limb, morals, or health of children. In some States the employment of children in begging, theatrical and circus exhibitions, on dangerous machinery, in occupations requiring the handling of intoxicating liquors, nightwork, etc., is specifically forbidden. Where the employments forbidden are not specifically enumerated the enforcement of such provisions of law is difficult, from lack of judicial interpretation as to what constitutes an employment dangerous to life, etc.

The strict enforcement of child-labor laws sometimes occasions hardship, as when school attendance is required of children dependent upon their own earnings for support, or who are obliged to support others in whole or in part. This is a perplexing state of affairs, which has engaged the thoughtful attention of those interested in the welfare of children and led to the adoption of remedial measures in at least two cases, namely, the "child-labor scholarships" of New York City, described in the last Report (1906) of the Commissioner, pp. 1286–7, and the Ohio statute "providing relief to enable children to attend school." According to the terms of this statute local school authorities are obliged to furnish any child such as has been described "text-books free of charge, and such other relief as may be necessary to enable the child to attend school. * * * Such child shall not be considered or declared a pauper by reason of the acceptance of the relief herein provided for."

An extended summary of the compulsory attendance and child-labor laws of the various States is given in the New York State Library Bulletin 114, published by the New York State Education Department, 1907.

Statutory provisions relating to compulsory attendance and child labor.

(BROUGHT DOWN TO CLOSE OF 1907.)

COMPULSORY EDUCATION.				CHILD LABOR.[a]	
State.	Age.	Annual period.	Penalty on parents for neglect.	Age under which specified employments are forbidden.	Educational restrictions on child labor.
Alabama				10 years, in factories in all cases; 12, unless orphans, or children of the widowed or disabled; 12, in mines.	
Arizona	[b] 8–14	6 months; 20 weeks consecutive.	$5 to $25		No child under 14 may be employed during school hours.
Arkansas				12 years, in all cases in manufacturing establishments, except canning industries in vacation; 14, unless to support a parent or self, as specified by law; 14, in mines; females not at all in mines.	No child 14 to 18, unable to write, may be employed in a manufacturing establishment unless he has attended school 12 weeks the preceding year.
California	8–14	Full term	First, not over $10 or 5 days' imprisonment; subsequent, $10 to $50, or 5 to 25 days, or both.	14 years, in any mercantile or manufacturing establishment, workshop, hotel, or as messenger, etc. Children 12 to 14, upon permit, may work if parents incapacitated or during vacation.	No minor under 16 may work for gain in school hours unless he can read and write English or attends night school.
Colorado	[c] 8–16	do	$5 to $25	14 years, in any underground works, mine, smelter, mill, or factory. No female may be employed in a coal mine.	Unlawful to employ children under 14 during school hours unless they have complied with the school-attendance law; under 16, unable to read and write, unless attending day or night school.
Connecticut	[d] 7–16	do	Not exceeding $5 each week of absence.	14 years, in any mechanical, mercantile, or manufacturing establishment.	Children under 14 may not be employed while school is in session. Children 14 to 16 can not leave school to be employed unless their education is satisfactory to the local or State school board.
Delaware	7–14	5 months (may be reduced by districts to 3).	First, not over $2; after, not over $5 On default, imprisonment 2 to 5 days.	14 years, in any factory, workshop, or manufacturing establishment, except in canning industry, etc., or to support widowed mother.	No child 14 to 16 may be so employed unless he has attended day or night school 12 weeks the preceding year.
District of Columbia.	8–14	Full term	Not exceeding $20		
Florida				Children under 15 may not be employed more than 60 days without consent of legal guardian.	

[a] See remarks introductory to the table.
[b] To 16, if unable to read and write English.
[c] Children 14 to 16 whose labor is necessary to their own or parents' support are excused.
[d] Not applicable to children over 14 lawfully employed to labor at home or elsewhere.

Statutory provisions relating to compulsory attendance and child labor—Continued.

COMPULSORY EDUCATION.				CHILD LABOR.	
State.	Age.	Annual period.	Penalty on parents for neglect.	Age under which specified employments are forbidden.	Educational restrictions on child labor.
Georgia				10 years, in or about any manufacturing establishment; 12 years, after Jan. 1, 1907, except for support of self or parents in specified cases.	After Jan. 1, 1908, no child under 14 may be employed as in preceding column (with the exception there noted) unless able to write and has attended school 12 weeks the preceding year; under 18, unless so attended school.
Idaho	[a] 8–16	Full term	Not over $300, or imprisonment not over 6 months, or both.	14 years, in any mine, factory, workshop, mercantile establishment, laundry, hotel, etc., except over 12 during vacations.	No child under 14 may be employed in any way during school hours.
Illinois	[b] 7–16	Full term, to be not less than 110 days of actual teaching.	$5 to $20 and costs; stand committed until paid. Penalty for false statements as to age or attendance, $3 to $20.	14 years, in any mercantile institution, factory, office, theater, elevator, etc., or as messenger or driver; 16, in or about any mine. No female may work in or about a mine.	No child 14 to 16 unable to read and write may be employed unless attending an evening school, if there is one. No child under 14 may be employed at any work for wages during the school term.
Indiana	[c] 7–14	Full term	$5 to $25, and, in discretion of court, imprisonment 2 to 90 days.	14 years, in any manufacturing or mercantile establishment, mine, quarry, laundry, renovating works, bakery, or printing office. No female may work in a mine.	Children under 16, unable to read and write English, may not be employed in foregoing employments except in vacation of public schools.
Iowa	[c] 7–14	16 consecutive weeks	$3 to $20	14 years, in any mine, factory, mill, shop, laundry, packing house, elevator, or store where more than 8 persons are employed.	
Kansas	[c] 8–15	Full term [d]	$5 to $25	14 years, in any factory or packing house or in or about any mine; 16, in any dangerous, etc., employment.	No minor under 16 may work in a coal mine unless he can read and write and has attended school 3 months in the year.
Kentucky	7–14	8 consecutive weeks; full term in cities of first, second, third, and fourth classes.	First, $5 to $20; subsequent, $10 to $50.	14 years, in any workshop, factory, mill, or mine, unless the child has no other means of support.	No child under 14 to be employed in any mercantile, laundry, or printing establishment, or as messenger, except during vacation.
Louisiana				12 years (boys), 14 (girls), in any factory, mill, warehouse, or workshop in cities of 10,000 or more.	Children under 14 may not be employed in foregoing employments, nor in clothing, dressmaking, or millinery establishments, unless they have attended school 4 months in preceding year.

Maine	7–15	Full term	Not exceeding $25, or imprisonment not exceeding 30 days.	14 years, in any manufacturing or mechanical establishment.	Children under 15 shall not be employed in any manufacturing or mechanical establishment, except during vacation, unless they have attended school 16 weeks during preceding year.
Maryland [e]	[f] 8–12	do	Not exceeding $5	14 years, in mills and factories (except canning establishments), unless self, widowed mother, or invalid father solely dependent upon such employment. 19 counties exempt from law.	No minor 12 to 16, unable to read and write English, may be employed where there is an evening school unless attending that or another school.
Massachusetts	[g] 7–14	do	Not exceeding $20	14 years, in factories, workshops, or mercantile establishments.	Children under 14 may not be employed at any work for wages during school hours; from 14 to 16 may not be so employed in any factory, workshop, or mercantile establishment if unable to read and write.[h]
Michigan	7–16	do	Fine of $5 to $50, or imprisonment 2 to 90 days, or both.	14 years, in any manufacturing or mercantile establishment, workshop, laundry, store, office, hotel, messenger service, etc.	Children 14 to 16, unable to read and write English, may not be employed.
Minnesota	8–16	do	Not over $50, or imprisonment not over 30 days.	14 years, in factories, mills, workshops, or mines.	Children under 14 years may not be employed in any service during school term; under school age (16 years), in any occupation during school term unless they have attended school the prescribed period; under 16, unable to read and write English, in any indoor occupation (except in vacation) unless attending day or evening school.
Missouri	[i] 8–14	Not less than ½ of term. Full term in cities of over 500,000.	$10 to $25, or imprisonment 2 to 10 days, or both.	14 years, in any mine, manufacturing or mercantile establishment, laundry, etc., in cities of over 10,000; no females in mines.	No child 8 to 14 may be employed in any way in school hours unless he has complied with the attendance law. No boy under 16 may work in a mine unless he can read and write.
Montana	[j] 8–14	Full term; in no case less than 16 weeks.	$5 to $20	16 years, in mines or underground works.	Children under 14 not to be employed during school sessions unless they have completed the studies required by law; from 14 to 16, if unable to read and write English.

[a] Except children over 14 who have completed 8th grade, or have to support selves or parents.
[b] Children 14 to 16 necessarily and lawfully employed are exempt.
[c] Inclusive.
[d] 8 weeks for children over 14 who can read and write English and are at work to support themselves or others.
[e] The provisions tabulated for Maryland (except in fifth column) are those of the act of 1902, whose operation is limited to Baltimore City and Allegany County.
[f] To 16 unless regularly employed to labor at home or elsewhere.
[g] To 16 if wandering about public places without lawful occupation, or if unable to read and write.
[h] Must be able to so read and write as is required to enter the second grade in 1906, third in 1907, and fourth in 1908 and after.
[i] To 16 years in cities of over 500,000 for children not lawfully and usefully employed 6 hours a day.
[j] To 16 if unemployed.

Statutory provisions relating to compulsory attendance and child labor—Continued.

COMPULSORY EDUCATION.				CHILD LABOR.	
State.	Age.	Annual period.	Penalty on parents for neglect.	Age under which specified employments are forbidden.	Educational restrictions on child labor.
Nebraska	[a] 7–15	Two-thirds of school term; in no case less than 12 weeks. Full term in cities.	$5 to $25 (on truant officer)	14 years, in any manufacturing or mercantile establishment, office, hotel, etc.	No child under 14 may be employed in any service during school hours.
Nevada	8–14	16 weeks; 8 consecutive	First, $50 to $100; subsequent, $100 to $200; with costs.		
New Hampshire	[b] 8–14	Full term	First, $10; subsequent, $20	12 years, in any manufacturing establishment.	No child under 14 may be employed during school sessions, nor under 16 if unable to read and write English. No minor unable to read and write English may be employed unless attending day or evening school, if any is held.
New Jersey	7–14	do	"Punishable as a disorderly person."	14 years, in factories, workshops, mills, or manufacturing establishments; also mines.	Children under 15 must have attended school 12 weeks the preceding year as a condition of employment.
New Mexico	7–14	3 months	$5 to $25, or imprisonment not exceeding 10 days.		
New York	[c] 8–16	Full term (October 1 to June 1).	First, not exceeding $5; subsequent, not exceeding $50, or imprisonment not exceeding 30 days, or both fine and imprisonment.	14 years, in factories; if 14 to 16, the child must have attended school 130 days the preceding year, and be able to read and write English, and cipher. Similar provisions apply, in places of over 3,000 population, to work in mercantile establishments, business offices, restaurants, hotels, express or messenger service, except for children over 12 in small places during vacation. For work in or about mines 16 years is the minimum. No female may work in a mine.	Unlawful to employ in any business or service child under 14 during school term; 14 to 16, unless has attended 130 days preceding year, and can read and write English, and cipher, or (in first and second class cities) has completed elementary course or attends evening school 16 weeks a year. See preceding column.
North Carolina[d]	8–14	16 weeks	$5 to $25	12 years, in any factory or manufacturing establishment (does not apply to oyster canning and packing); 12 years, in mines employing over 10 men (boys); children 12 to 13 may be employed in factories only as apprentices.	Apprentices 12 to 13 years must have attended school 4 months in preceding 12
North Dakota	8–14	Full term	$5 to $20 (on school official)	12 years, in mines, factories, and workshops (constitution of State).	Children under 14 may not be employed in any manner during school hours unless they have attended school 12 weeks during the year.

Ohio	[b] 8–14	Full term; in no case less than 24 weeks.	$5 to $20; on default, imprisonment from 10 to 30 days.	14 years, in mines, factories, workshops, mercantile or other establishments.	No child under 14 may be employed in any other manner during school sessions; or between 14 and 16 if unable to read and write English; or in mine during school term if under 15.
Oklahoma	[e] 8–16	3 months [e]		16 years, in mines (no girls in mines). [e]	
Oregon	[f g] 9–14	Full term	$5 to $25 fine, or imprisonment 2 to 10 days, or both.	14 years, in any factory, store, workshop, in or about any mine, or in the telegraph, telephone, or public messenger service.	Foregoing employments forbidden to any child 14 to 16 unless attended school 160 days preceding year and can read English. No child under 14 may be employed in any work for compensation during school hours.
Pennsylvania	[h] 8–16	Full term; but the school board of each district has power to reduce this to not less than 70 per cent of the term.	First, not exceeding $2; subsequent, not exceeding $5; on default, imprisonment; first, not over 2 days; subsequent, not over 5.	14 years, in any employment, except domestic, coal mining, or farm labor; 16 years in coal mines; 14 years in or about the outside workings of coal mines. Girls may not work in or about coal mines.	No child 14 to 16 may be employed unless he can read and write English and has complied with the school laws.
Rhode Island	[i] 7–15	Full term	Not exceeding $20	13 years before, 14 after Dec. 31, 1906, in any factory, manufacturing or business establishment.	Children under 13 may not be employed except during school vacations.
South Carolina				10 years after May 1, 1903; 11 after May 1, 1904; 12 after May 1, 1905, in any factory, mine, or textile establishment, except that certain self-dependent children may work in the latter.	Children may work in textile establishments in June, July, and August if they have attended school 4 months during the year and can read and write.
South Dakota	[g] 8–14	Full term; but districts may reduce it to 16 weeks, 12 consecutive.	$10 to $20 and costs; stand committed till paid.	14 years, in mines	No child 8 to 14 to be employed during school hours unless he has attended school 12 weeks during the year.
Tennessee	(j)			14 years, in workshops, factories, or mines.	
Texas				12 years, in mills, factories, manufacturing or other establishments using machinery; 16 years in mines, distilleries, or breweries.	Unlawful to employ children 12 to 14 who can not read and write English, in mills, factories, etc., certain self-dependent children excepted.
Utah	8–16	20 weeks, 10 consecutive; in cities of the 1st and 2d class 30 weeks, 10 consecutive.	First, not exceeding $10; subsequent, not exceeding $30, with costs.	14 years, in mines (constitution of State).	

[a] To 16 years in cities.
[b] To 16 if unable to read and write English.
[c] Does not apply to children 14 to 16 lawfully and usefully employed.
[d] Law does not take effect in any county until voted by the county; does not apply to 11 counties, nor to children over 12 lawfully employed at home or elsewhere.
[e] Constitutional provision.
[f] To 16 if unemployed.
[g] Inclusive.
[h] Not applicable to children over 13 who can read and write English and are regularly employed in useful service.
[i] Not applicable to children over 13 who are lawfully employed.
[j] A compulsory attendance act was passed in 1905 applying only to Claiborne and Union counties; one for Campbell and Scott counties in 1907.

Statutory provisions relating to compulsory attendance and child labor—Continued.

COMPULSORY EDUCATION.				CHILD LABOR.	
State.	Age.	Annual period.	Penalty on parents for neglect.	Age under which specified employments are forbidden.	Educational restrictions on child labor.
Vermont	[a] 8–15	Full term	$5 to $25	12 years, for any railroad company or in any mill, factory, quarry, or workshop, or carrying messages.	No child under 16 who has not completed the 9-year school course may be employed in any railroad, factory, mine, or quarry work, or in delivering messages, except out of school hours.
Virginia				12 years, "in any manufacturing, mechanical, or mining operation."	
Washington	8–15	Full term	Not over $25	14 years, in mines (boys); 12 (boys), in the outside workings of a colliery; 14, in any factory, mill, workshop, or store, except (12 to 14) in specified cases of need.	Children under 15 may not be employed while the schools are in session, unless excused by the school superintendent.
West Virginia	8–14	20 weeks	First, $2; subsequent, $5	12 years, in factories, workshops, mercantile or manufacturing establishments; 14, in mines (no girls may work in mines).	No child under 14 shall be so employed during school term if it hinders regular attendance.
Wisconsin	[b] 7–14	Full term in 1st class cities; in 2d class cities not less than 8, elsewhere not less than 6 school months.	$5 to $50 and costs, or imprisonment not over 3 months, or both.	12 years, in any occupation; 14, in factories, workshops, mines; 14 to 16, in any occupation without specified written permit.	Children 12 to 14 may not be employed in any occupation, except during school vacations by specified written permit, in stores, offices, hotels, mercantile establishments, laundries, or public messenger service, where they reside (does not apply to farming or other out-door work).
Wyoming	7–14	6 months	Not exceeding $25	14 years, in mines; females may not work in mines. (Constitution.)	
United States laws (for Territories).				12 years, in the underground workings of any mine.	

[a] Children over 15 or under 8, when once enrolled, must attend the full term they are enrolled for.
[b] To 16, if not regularly and usefully employed at home or elsewhere.

COEDUCATION OF THE SEXES.

Coeducation, or the instruction of both sexes in the same schools and classes, is a characteristic feature of public education in the United States. Of public elementary pupils at least 96 per cent are enrolled in mixed schools and of public secondary pupils 95 per cent. The very general favor with which the policy is regarded is indicated also by the fact that of the pupils enrolled in private secondary schools 40 per cent are in mixed schools. As to higher institutions—colleges and universities—63 per cent of all undergraduates are in coeducational institutions. The proportion would doubtless be much higher if only State universities and land-grant colleges were considered. Altogether above sixteen million children and youth of this country are studying in coeducational schools and colleges.

Of colleges and universities in this country other than those for women only, 70 per cent are coeducational. In the number are included 34 universities endowed with public funds, viz, 32 State and 2 Territorial; also 18 private foundations of high order.

The number of women college students (undergraduates) reported to this Office in 1906 was 48,497, of whom 60 per cent were in coeducational colleges. The number of women graduate students was 1,947, of whom 83 per cent were in coeducational colleges.

The most significant fact in the recent history of coeducation is the admission of women to graduate courses in certain universities of the East, noticeably Yale and Columbia, which exclude them from the undergraduate departments.

But while coeducation of the sexes is general in the public schools and the State universities of our country and has been adopted also in many private institutions it is a subject of ever recurring agitation and in some sections of the country is strongly opposed. The experiment of segregating the sexes at Chicago University during the junior college period in accordance with a proposition of the trustees adopted October 22, 1902, and the decision adopted the same year to limit the number of women students in Leland Stanford Junior University to 500, excited widespread attention and much anxiety among those who had long striven to secure for women equal educational opportunities with men. Fears were expressed that these measures indicated a covert opposition to this purpose. Events, however, have in no way justified these apprehensions. The measures adopted at Chicago University and at Leland Stanford Junior are simply efforts to modify methods and policies according to circumstances. The same tendency is illustrated in the more recent development at Wesleyan University, Middletown, Conn. This is the only higher institution in the State which is completely coeducational, and the number of women students, which was formerly

large, is steadily declining. It is understood that the men students are opposed to the presence of women students, a feeling which is not shared by the president and trustees. At the same time it is probable also that the women students would prefer a separate college, since this arrangement accords with the prevailing custom in the New England States. It is reported that measures are already in progress for the establishment of a college for women which shall bear the same relation to Wesleyan University that Radcliffe College bears to Harvard University.

An experiment of what is called "limited segregation" of the sexes was authorized in the Englewood High School, Chicago, about two years ago. Under this plan the first-year boys and girls are taught in separate classes, but they assemble together as before and study in the same room. The method of teaching is varied to some extent. This experiment is reported to have worked very successfully, and it has awakened much interest in the subject in adjoining States.[a]

As one result of this interest a formal inquiry was sent out to school superintendents and principals of high schools in Wisconsin, comprising the following questions:

1. Is the plan of coeducation carried out in detail in your school?
2. Has the plan of segregation ever been tried? If so, with what results?
3. If you were free to work out your own ideals, would you segregate the sexes?
4. Are the boys benefited by coeducation? If so, how?
5. Are the girls benefited?
6. What evils resulting from coeducation have you observed?
7. Do you favor different studies for boys and girls?
8. Throughout Europe there seems to be a conviction that our system of coeducation will undermine morality in American life. Will you give your opinion based upon your observations?

According to the Wisconsin Journal of Education[b] the summary of replies shows the following:

Eighty-two per cent of the correspondents represented schools where coeducation was carried out in detail. Seventy-two per cent had never tried segregation, 10 per per cent practiced it, and 18 per cent had tried limited forms of segregation with good results.

Seventy per cent would not segregate the sexes if free to do so, 10 per cent would do so, while 20 per cent indorse some form of limited segregation. * * * The consensus of opinion is decidedly against the conviction that coeducation will undermine morality in American life, the majority holding that the exceptional evils resulting from the mingling of the sexes are due to the lack of proper system and proper supervision rather than to coeducation per se. Superintendents who have been connected with both private schools for boys and with coeducational secondary schools testify that the moral atmosphere in the latter is unquestionably purer. A considerable number of the replies to question three seems to have been made with this idea in mind.

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[a] See School Review for December 1906, pp. 226–738.
[b] Vol. XXXIX, No. 8 (October, 1907), pp. 295–6.

The coeducation of the sexes was one of the topics considered in a recent published symposium[a] on the following question: "How may the medical and teaching professions cooperate to improve the moral, mental, and physical condition of the young?"

The contributions to this symposium included a paper on Coeducation by Dr. G. Stanley Hall and one on The Advantages or Disadvantages of Coeducation by Dr. William T. Smith.

In his paper Doctor Hall emphasizes anew his objections to coeducation based on historic, social, and biologic considerations. Doctor Smith presents the main arguments for and against the system very dispassionately and throws the weight of his opinion in favor of the latter.

At the quarter centennial of the meeting of the Association of Collegiate Alumnæ, which was held in Boston in November, 1907, the subject of coeducation was discussed with special reference to recent objections and the weakness of many of the standard arguments against the system pretty clearly demonstrated.

The most notable article on the subject that has lately appeared in print is an elaboration of the address of President Thomas, of Bryn Mawr College, at the meeting referred to.[b] These discussions and experiments do not constitute a reaction against the general policy of coeducation in this country, which is too deeply rooted in the approval of our people to be radically changed. They are signs of the flexibility of our systems and institutions, which readily admit of modifications according to circumstances.

FOREIGN COUNTRIES.

In England 65 per cent of the departments into which the elementary schools are divided have boys and girls in the same classes; in Scotland 97 per cent. Statistics for Ireland show that 51 per cent of the national schools have a mixed attendance of boys and girls.

Separate education is the general policy in English schools of secondary grade, and where both sexes are admitted to the same school it is generally to separate departments. The royal commission on secondary education appointed in 1894 advocates the extension of the coeducational policy, and since the publication of their report (1895) experiments in this direction have noticeably increased.

In the British colonies, with very few exceptions, both mixed and separate schools are found. In Ontario all the schools are mixed. In Quebec the schools for English children are as a rule mixed, but in those for the French, the sexes are separated. In the Australasian colonies the tendency to separate departments for boys and girls is

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[a] Published in the Bulletin of the American Academy of Medicine, October, 1906, pp. 653–662.

[b] Woman's College and University Education. M. Carey Thomas. Educational Review, January 1908, pp. 64–85.

noticeable in cities. In Cape Colony, while nearly all schools are mixed, separate schools for girls are encouraged.

In France custom and sentiment favor the separate education of boys and girls, and the law requires every commune having above 500 inhabitants to establish a separate school for girls unless specially authorized to substitute therefor a mixed school. The number of mixed schools is, however, gradually increasing.

In secondary schools, public and private, separate education is the universal rule.

Germany: Separate education is the preferred policy of the German States, but is not practicable in the rural primary schools. According to statistics for 1891, in Prussia, two-thirds of the children in the common schools were in mixed classes, but in the cities the proportion was only three-tenths. In Saxony only the two lowest classes are mixed, so that separation occurs generally at the tenth year of age—always by the twelfth.

Other continental countries: Similar conditions prevail in the remaining countries of Europe, the tendency toward separation being most strongly marked in the Catholic countries. In Italy the law calls for separate schools for boys and girls, and if they attend at the same building it must be in separate departments, each provided with its own entrance door. The lowest classes, however, may be, and often are, mixed.

In Norway, and to a less extent in Denmark, girls are securing admission to secondary schools formerly reserved for boys.

The South American republics follow the precedent of the Latin States of Europe. Brazil, like Italy, requires separate schools for the two sexes. In 1888 the experiment of admitting boys and girls to the same class room was made in a few schools, but they were seated in different rooms outside of recitation hours.

Coeducation in the universities of Europe.—At Oxford University women are admitted by courtesy to the lectures of about 160 professors and readers. They are also admitted to the examinations for bachelor of arts, but the degree itself is not conferred upon them. Substantially the same arrangements have been adopted at Cambridge. Durham University confers upon women all degrees excepting those in divinity. London University, Victoria University, and the University of Wales make no discrimination on account of sex.

The university colleges established in England since 1868 are open to men and women. By the "universities act" of 1889 the Scotch universities were authorized to open their doors to women. Edinburgh admits them to the classes with men. Glasgow has affiliated Queen Margaret College for Women, and more recently (1895) opened all lectures in the faculty of arts to women. The University College of Dundee, affiliated to St. Andrews, is coeducational.

Women are admitted to all the privileges of the Royal University of Ireland, and in 1903 a statute was passed admitting them to Trinity College (Dublin).

In France women have never been legally deprived of university privileges, and since 1863, when the first woman was enrolled in a Paris faculty, the number of women matriculates has been gradually increasing.

The universities and secondary schools of Italy admit students of both sexes to the same classes, a policy at variance with that pursued in the elementary schools.

Women have recently been admitted to courses in the universities of Germany, Austria, and Hungary, special authorization being required in each individual case.

STATUS OF CITY TEACHERS IN CONNECTICUT.

[Report made to the Connecticut Association of School Superintendents by its secretary, Supt. William P. Kelly, of Meriden.]

FURTHER EDUCATION—ELIGIBILITY.

Professor Judd's striking paper delivered before this body a year ago, and circulated subsequently as a state document, called emphatic attention to the need of improving the teachers already in service through the liberalizing influence of academic as well as professional study. The idea has failed as yet to get a working hold, as will be seen by the following:

Number of teachers studying in—	1906–7.	1907–8.
Summer schools	27	35
Correspondence schools or teachers' courses at college during school year	29	43
University extension courses of 10 to 20 lectures	220	175
Total	276	243
Number of teachers in towns reporting	.....	2,959
Number of teachers in the State	.....	4,500

Not one teacher in ten, even of those most favorably environed, is engaged in any serious study other than her daily preparation, not even during vacations. In Ansonia, in the second, north, south, Washington, and west middle districts of Hartford, in Meriden, New Haven, Norwich, Southington, and Stamford, university extension courses of from ten to twenty lectures have been conducted for teachers, and in New Britain a six-lecture extension course for the general public was made possible by the unanimous support of the teachers. The attendance upon occasional lectures is not here considered.

No financial inducements are being offered to teachers to do such work, if we except the fact that seven Hartford teachers had their

tuition paid in a summer school, and a few teachers have been braced up to get a State certificate by a promise of more pay. The teachers claim that they are either too poor or too tired or both. The school officials evidently agree, since not a dollar of the $103,751 which goes into increased salaries this year is given on condition that some of it be spent for further education.

The Meriden salary schedule opens the two highest class positions only to those who have academic credits. In this city 90 teachers are now studying in university extension courses, and 9 attended summer schools last summer, many of whom will in this way qualify for the extra salary next year.

A study of the eligibility requirements shows no material change from last year so far as the rules of eligibility go. Danbury and East Hartford have come into the column of those requiring a normal diploma, and New Hartford and New Canaan of those requiring a State certificate.

A few towns hold fast to the theory that teachers' jobs are for residents only, but the vast majority of towns are out for the best teachers, no matter where they come from. Taftville has joined the latter class.

The most significant fact is that 21 out of 42 towns reporting show an increase in the proportion of normal graduates, and 13 show an increase in the proportion of college graduates.

Nine more towns have this year turned over the selection of teachers to the superintendents. It seems perfectly clear that the towns progressive enough to employ a professional superintendent, to put the selection of teachers into his hands, and to let him go outside, if necessary, for teachers, are cornering the available supply of trained teachers, and that the other towns are going to fare worse and worse each year.

No other fact in this investigation demonstrates more conclusively the timeliness of to-day's topic—the right and duty of the State to so improve conditions for teaching in small towns that they may be enabled to have their share of normal trained teachers hereafter.

WAGES.

Though the wages of teachers have been increasing during the past year in a very marked manner, this year's increase is but part of the general movement begun several years ago and still going on.

About 2,000 out of 3,000 teachers in the 42 towns reporting will receive in 1907–8 an average of $59.50 more than they did last year. All but 78 of those getting the increase are grade teachers. Though the total of $116,620 is made imposing by the action of the large cities named below, they have not done more in proportion than

many of the smaller ones. Thirty-three towns report an increase, only 9 report none. The following report more than $1,000:

	Increase in teachers' wages.
New Haven	$51,000
Waterbury	14,000
Bridgeport	10,000
Meriden	8,620
Hartford	5,500
New Britain	4,500
Torrington	3,000
Danbury	2,892
Stamford	2,500
East Hartford	1,400
West Haven	1,100
Middletown	1,060
Plainfield	1,052
Naugatuck	1,000

Wages have been increased both by increasing the schedule and by advancing teachers under the schedule.

Eleven towns report higher maximum and 6 report higher minimum wages for high school teachers, principals, supervisors, etc.

Fourteen towns report higher maximum and 12 report higher minimum for grade teachers.

Five report a more rapid rate of advance under the revised schedules.

Twenty-three towns out of the 42 reporting have begun to hold out greater wage possibilities, both to experienced teachers and to beginners, by readjusting their maximum and minimum salary limits.

It is impossible to attribute the advance in wages to any single influence, yet it is clear from the returns that the superintendents led the way in at least ten instances, and that the school board in taking a stand before the people favorable to the teachers feel that such a stand was necessary to save the standard of the schools. In only four cases was there any activity on the part of the teachers' associations. In most places it was a case of raising the bid in order to get the kind of teachers desired.

The amount by which each teacher is benefited by this year's increase is so small that it can hardly more than cover the increased cost of living. If the teacher's position is to draw qualified persons from other occupations it needs to be paid much better still.

Perhaps the best example of what a small town can do is seen in the case of East Hartford, where by a recent vote of the board all teachers except kindergartners must hold State certificates or be normal graduates or college graduates. This vote forced the districts to pay $1,400 more in order to meet the requirements. Here the qualifications and the wages were simultaneously increased.

PENSIONS AND TENURE.

In the matter of pensions it is clear that the teachers and superintendents are not agreed. The only places reporting any interest are Hartford, New Haven, Milford, Windsor Locks, and Middletown, while a few report emphatically their lack of interest. The State appropriation of $10,000 to the treasury of the annuity guild has strengthened that organization. Those who belong to it will find their membership a profitable investment, though a small one.

As for tenure, the practice of going through the form of reelecting teachers annually is practically universal. If a teacher does not suit she is simply not reelected. In many places the superintendent gives her a friendly hint to resign. The teachers acquiesce in the arrangement, as the idea of giving a formal hearing seemed unusual and practically unnecessary.

School boards and superintendents seem to realize the sensitiveness of those with whom they have to deal, and those who fail are eliminated as quietly as possible. With the increased care our members are giving to the selection of teachers the proportion of failures will grow less, yet our sympathy is extended to the town whose superintendent reports, "once in, always in, is the policy of the board to date," and to the other whose superintendent says, "the method of removal is by marriage or death. No teacher has been removed for twenty years."

This, in brief, is the year's record for the part of the State which is under skilled supervision. It is not a bad argument for the school system there in vogue. We meet to-day to see what can be done for the other part, much of which is laboring under an antiquated system of management and without social educational leadership.

CERTAIN EDUCATIONAL MOVEMENTS IN CITIES.

INDUSTRIAL EDUCATION IN CITY SCHOOLS.

Apparently an era of growth has commenced for trade or apprentice schools throughout all sections of the country. The two Massachusetts industrial commissions, through their reports and through their labors in behalf of industrial education, have done much to call the attention of the country to the changed industrial conditions which demand readjustment of certain features of our educational programmes, or at least extensions and additions of a more practical character to these programmes than have as yet been widely considered.

The second of the commissions mentioned was charged with so many important duties in connection with the development of

industrial education, especially in cities and towns, that the main provisions of the act by which it was created are here quoted:

SEC. 2. The commission on industrial education shall be charged with the duty of extending the investigation of methods of industrial training and of local needs, and it shall advise and aid in the introduction of industrial education in the independent schools, as hereinafter provided; and it shall provide for lectures on the importance of industrial education and kindred subjects, and visit and report upon all special schools in which such education is carried on. It may initiate and superintend the establishment and maintenance of industrial schools for boys and girls in various centers of the Commonwealth, with the cooperation and consent of the municipality involved, or the municipalities constituent of any district to be formed by the union of towns and cities as hereinafter provided. The commission shall have all necessary powers in the conduct and maintenance of industrial schools, and money appropriated by the State and municipality for their maintenance shall be expended under its direction.

SEC. 3. All cities and towns may provide independent industrial schools for instruction in the principles of agriculture and the domestic and mechanic arts, but attendance upon such schools of children under 14 years of age shall not take the place of attendance upon public schools as required by law. In addition to these industrial schools, cities and towns may provide for evening courses for persons already employed in trades, and they may also provide, in the industrial schools and evening schools herein authorized, for the instruction in part-time classes of children between the ages of 14 and 18 years who may be employed during the remainder of the day, to the end that instruction in the principles and the practice of the arts may go on together: *Provided*, That the independent schools authorized in this section shall be approved as to location, courses, and methods of instruction by the commission on industrial education. (Acts of 1906, ch. 505.)

The fourth section provides for the uniting of two or more cities or towns to form a district for the maintenance of industrial schools. The section following provides that the Commonwealth shall reimburse those cities expending for industrial education more than $5 per each thousand dollars of valuation to the amount of one-half; those expending between $4 and $5, to the amount of one-third; and those expending less than $4 to the amount of one-fifth.

The commission of 1905 was appointed to investigate the subject of industrial and technical education, and upon its recommendation a second commission was appointed. The second commission, in discussing, in their report for 1907, the conclusions of the preliminary commission, say:

That report showed as a result of public hearings, that there was—

A strong general interest in industrial education among students of social phenomena and expert students of education, as furnishing a means of securing greater efficiency among wage-earners.

A practical and specific interest among manufacturers and wage-earners, now that the old apprenticeship system has almost entirely passed away, in the industrial school as a means of training in technical skill and "industrial intelligence."

A growing feeling of the inadequacy of the existing public school system, and a desire that the schools of the State should meet in a more practical way the exact needs of the great body of the children and youth of the State.

A general lack of definite ideas as to the proper scope or method of the desired industrial schools.

The inquiries of the commission indicated clearly that it was not entirely impracticable to develop a system of industrial education which would be free from the dangers which trades unions representatives pointed out.

The preliminary commission also felt it clear, from the result of inquiries made by it, that the whole burden of conducting such schools should not be laid upon the local cities and towns, but that the State should give substantial aid.

In general, the conclusions reached by the preliminary commission, as a result of its various inquiries, including an important special investigation into the problem of what becomes of the mass of boys and girls during the three or four years after they leave the grammar school, may be said to mark an epoch in educational progress not only for Massachusetts but for the country as a whole.[a]

The new commission, of which Prof. Paul H. Hanus, of Harvard, is chairman, in its report for 1907 lays down several important propositions, which may be briefly stated as follows: (1) That the present conditions are usually unfavorable to the training in shop or factory of workmen possessing "industrial intelligence;" (2) That though the public schools are doing better work than ever before, their general scheme of education does not comprehend education with a vocational purpose; (3) that the high schools, even where they have commercial courses or courses in manual training, are not vocational in their training, but are fundamentally schools for general education; (4) that independent industrial schools offering four years of training for pupils 14 or 15 years of age on admission should be established to supplement the existing school system.

The work of the Evening School of Trades of Springfield, Mass., organized in 1898, is well known. This school has departments of mechanical drawing, machine-shop practice and tool-making, wood-turning and pattern-making, plumbing, mathematics, and electricity.

Philadelphia opened a trade school in October, 1906, which immediately became crowded to the limit. Instruction is offered in the following trades: Printing, plastering, blacksmithing, bricklaying, plumbing, sheet-metal working, painting, electrical construction, carpentry, steamfitting, pattern-making, and mechanical and architectural drawing. Both day and evening sessions are held. The evening department is open five nights per week. As to the choice of trades in which instruction is to be given, the superintendent states that emphasis is laid upon those trades that are most removed from the competition of machinery, and that require a maximum of manual dexterity, and recommends to the board that the trade schools be limited in scope to the dominantly manual trades.

It is reported that Cleveland has recently opened an evening school for instruction in the machinists' trade, but no data are at hand.

A somewhat different type of institution is the secondary industrial school established through the efforts of Superintendent Gibson at

[a] Massachusetts Public Document No. 76. Report of the Commission on Industrial Education, March, 1907. Boston: 1907. Page 13.

Columbus, Ga., and opened December 10, 1906. The difference between this school and others where instruction in trades is offered is that the curriculum embraces academic subjects of high school grade in addition to the regular trade courses. The plan of development outlined for this school contemplates the erection of a group of eight buildings. The first of these, erected at a cost, including the equipment, of $125,000, has a capacity of 200 pupils. The school at present is preparing students for textile manufacturing, carpentering, machine-shop practice, pattern-making, dressmaking, millinery, and office work.

The Wisconsin trade school law, passed in 1907 (Laws of Wisconsin, 1907, ch. 122, secs. 926–22 to 926–30), empowers any city or school district containing a city "to establish, conduct, and maintain as part of the public school system" schools for practical instruction in trades to persons having attained 16 years of age. The schools established under this act are to be under the school boards of the respective cities, in the same sense as are the other public schools. The law permits the appointment, in each city establishing a trade school, of an advisory committee of five citizens not members of the board, to be known as the committee on trade schools. Each of the members of this committee must be skilled in one or more trades. The body is to assist in administration, to prepare, subject to the board's approval, suitable courses of study, and to aid in the equipment of buildings and purchase of property. For the maintenance of schools so organized cities are authorized to levy a tax to the limit of one-half of 1 mill, the proceeds of which must be used exclusively for the trade school or schools, but the use of regular school funds subject to return within three years is permitted until the proceeds of the tax becomes available.

In pursuance of the provisions of this law, the Milwaukee board took over the School of Trades, which had been organized in 1905 and opened on January 2, 1906, under the auspices of the Merchants' and Manufacturers' Association, and subsequently sustained by subscriptions. A provision of $100,000 per annum was made by the board. The trades taught while the school was under private control were drafting, plumbing, pattern-making, and machinery work. The board contemplates increasing the number of trades as fast as facilities can be supplied.

By an act approved July 30, 1907 (ch. 250, Public Acts, 1907), the legislature of Connecticut authorized the establishment and maintenance by any town or school district of a free public school for instruction in the principles and practice of such trades as the appropriate school authorities, with the approval of the State board of education, might designate. It is provided that schools established under this act shall be open to all residents of the State, barring only those under 16 who have not completed the eighth grade or an equiva-

lent course of study. The act further provides for the union of two or more towns into a trade school district. The buildings, equipment, courses of study, and the qualifications of teachers are made subject to the approval of the State board of education, to which body annual reports must be made by the local authorities.

Provision also is made for repayment to a town or district maintaining a trade school, by the State, a sum equivalent to one-half of the total expenditure in each year for the support and maintenance of such school, provided this sum does not exceed $50,000 in any one year, and that it is applied to the support of not more than two schools in any one district.

MEDICAL INSPECTION OF SCHOOL CHILDREN.

During the year 1906–7 much activity has been shown in this work. Following the passage of the State law on this subject in Massachusetts, many of the cities in that State have made efficient provision for inspection.

Under the operation of the Vermont law, which provides mainly for the examination of sight and hearing, 41,000 children were reported as having been examined during the year 1906–7, of whom 14,000 were found to have defective eyesight.

The following account of the work in Syracuse, N. Y., reprinted from a local newspaper in the school report of that city for the biennium 1906–7, may illustrate the popular attitude toward medical inspection in some places before its introduction, and the general difficulties to be encountered in introducing the system. This article also indicates how an efficient working of medical inspection upon a practical basis may serve to change completely the feeling in a community against the work:

The present system of health inspection in the public schools of Syracuse was inaugurated April 1, 1906. The experiment was not made without opposition. The public had to be brought to a realization of what it all meant. There were those who thought that bodily harm was to be done their children. Others were moved by a false sense of pride and were insulted at the insinuation that they were not careful of the welfare of their offspring. A strong feeling of antagonism was manifested by some. There were those who did not wish their sons and daughters to be examined except by the "family doctor." In fact, in one case a child was excluded from school because his parents persisted in forbidding the school inspector to examine him. As soon as the child was taken from the building the law regarding truants was brought to bear, and after a while the parents were made to see the good sense of the inspection.

It was not only the spirit of defiance on the part of the parents that it was necessary to overcome, but the children objected. In a great many cases they were frightened and felt that the doctors intended harm to them. Besides this it was also found that different attitudes had to be borne toward the pupils in the various grades. But all this opposition has been overcome and there is a much cleaner and safer condition existing in the schools of Syracuse to-day than there was one year ago, when the pres-

ent system was started. The teachers of the schools in which the inspection is made are one in saying that their classes are cleaner and better than ever before, and that in the latter part of the year the number of pupils excluded by the doctors on their rounds has decreased from 50 or 60 a day to 15 and less.

There are, all told, 44 schools which are inspected. Of these 36 are public and 8 parochial schools. The doctors who make the rounds of the schools say that teachers and scholars are most cordial in their spirit and do everything to assist the inspectors. The 44 schools are divided into 10 groups of 4 schools each. Each doctor is given 4 schools, with the exception of 4, who are given 5 each. These physicians make three forms of inspection—"class-room," "morning," and "physical." The class-room inspection is made on Mondays and Fridays of each week, and on the remaining three days a morning inspection is made. The physical inspection at present is made whenever the doctors may have the leisure. The first inspection, that of the class room, is very thorough. On the two days when these inspections are made the doctor has every pupil pass in order before him. Each child extends his hand, the arms bared to the elbow and the fingers expanded. The tongue is shown and the head examined. As each one passes if any sign of trouble is seen the child is asked to go to the main office to await the arrival of the doctor. When the complete inspection of every room in the school has been made the inspector returns to the main office to examine those pupils who have been sent from the other rooms. He then makes a private examination of each one, and if anything of a contagious nature is found the child is sent home with a card of explanation and advice.

There are three sets of cards. The first states that the child has this or that trouble and should receive immediate attention, either at the hands of the family doctor or, if that is too expensive, at the Free Dispensary. It also states how long the child should remain out of school. The second card simply states that the child should be examined and taken care of, but need not remain from school. The other card bears a printed prescription for treatment of the head when a disordered condition has been found. When a child receives a card which forbids him or her from attending school he goes home for treatment, and upon the expiration of the time for which he has been told to stay away he must return and report to the doctor, who makes another examination to see what condition the child is in and whether or not directions have been carried out. It is sometimes necessary to send some children home time and time again for the same trouble. In families where there are brothers and sisters the trouble often extends to them all, and it is found necessary to send the entire family home. The morning inspection is different from the class-room examination in that only those children who have been "spotted" by the teachers are examined. No child is excluded from the schools unless there is danger of contagion or evidence of willful neglect of the physician's orders.

These cases of persistent disregard of the direction are not tolerated, and it will be understood by all that such neglect deserves only the severest treatment. The physical inspection was started at the same time, April 1, 1906, and comprises a thorough examination of every pupil in the city as to his general physical condition. In these examinations the heart, lungs, and body are carefully looked after. There is always the danger, in so great a body of children, of there being evidences of disease or uncleanliness found on the body which could not be discovered in a class-room inspection.

Except in the case of the physical examination the doctor is not permitted to remove any clothing or to touch the child. In the case of the girls he may not press his ear to the body for the hearing of the heart and lungs, but must use a rubber tube provided for that purpose. Each inspector is supplied with a generous amount of sterilized tongue depressors, which are put into an envelope and destroyed after using, so that there will be no danger of contagion. There are approximately 21,000 pupils to be examined every week, and it will be seen that in the case of the physical examination it will still

be some time before the entire number has been inspected. As the pupils undergo this physical inspection a record is made and filed in Chief Medical Inspector Dr. Joseph C. Palmer's office in the city hall, so that reference can be made to it at any time, either by the doctor or by the parents of the pupil.

To take a trip with an inspector as he makes his rounds of the schools on the days when a class-room examination is made is full of human interests. There are many little happenings which are of a humorous nature and a few which have their pathetic side. As the doctor enters the room he is greeted by "Good morning, Doctor," and pens and pencils are dropped, while the class comes to order to await the word to rise. When all are at attention they are told to rise and face about, so that their backs are to the teacher and the doctor. They then begin to march in order before the inspector, who is seated near some window. One little lad in the back corner of the room may be detected washing his hands by means of the tongue. When he reaches the doctor he will extend the cleansed member, but hold back the one he did not have time to complete. He is, however, discovered by the relentless doctor and usually the verdict is a little soap and water. It has been found that the boys are not so sensitive to these rebukes as are the girls, who are ashamed to be told "to go and wash up." If the line is watched closely it will be seen that occasionally a boy or girl is making a second round, probably to be assured that the doctor missed nothing, but more naturally because it is pleasanter than to return to the task at the desk. It will be seen that the old spirit of dislike has been entirely supplanted by a feeling of willingness, and that the children look upon the visit of the inspector as a pleasant break in the routine of the week. Some curious questions are sometimes asked, such as "Must you go to school if your brother has the mumps?" and to this the answer is, "No, you must not," at which a smile may be seen stealing across the face of the questioner.

But it is not all humorous and some of the little tots, and the older ones as well, are living pictures of disgraceful neglect. There are little boys and girls whose parents have forgotten that upon them rests a parental duty, and that the children they have brought into the world must be prepared by them to meet its battles, and that the first lesson is that of cleanliness. In any city there must necessarily be many families where misery abounds and where the good there is in this world of ours becomes a mockery. This is true to a far greater extent in the city of Syracuse than perhaps is realized. The children of such people are born to misery and filth and the greatest duty of our public schools is to reach this class. Some of these pupils are suffering from neglected sores, which may develop into horrible diseases; some are ill from unknown causes and in danger of contracting lifelong afflictions.

In behalf of these children it has been recommended by Chief Medical Inspector Palmer that a nurse be employed by the city to make the rounds of the homes where parents are persistent in their neglect. Health Officer David M. Totman has approved this suggestion.

It can be realized, then, what a great work is being done toward improving the conditions existing among the poor children of the city. The system of inspection in the city of Syracuse was developed along the same lines which are in practice in the cities of New York, Philadelphia, and Hartford, Conn. A careful examination of the system in those cities was made by Dr. James N. F. Elliot, who visited each city in behalf of the Syracuse Bureau of Health.

In addition to the health inspection described above, the superintendent urges that closer attention be given to eye and ear tests, with a view to correcting defects of this kind by treatment in the care of the ear, and by the use of glasses in the case of the eye.

Newport, R. I., reports daily medical inspection under the direction of the Board of Health. "Four physicians examine every morning

all children absent the previous day, and also at intervals—for instance, the beginning of a term—they make an inspection of the whole school. Any child, also, who, for any reason, seems to the teacher to be a suspicious case is sent to the doctor at the morning visit. In case of doubt the pupils are obliged to report for several consecutive mornings until the doubt is removed or confirmed."

This type of inspection, namely, that which looks merely to protection from contagious diseases, seems to be successful when conducted by the health authorities of the town, and is usually the first step toward the adoption of a more extensive system of examination.

The plan of inspection followed at Yonkers, N. Y., is of the most comprehensive type, including examinations of physical conditions and for defects and diseases of whatever kind, as well as the ordinary defects of eye, nose, and throat. During the latter part of the year 1907 a visiting nurse was also employed. Her duties are thus described: "The nurse, acting with the joint authority of the Board of Education and the Board of Health, visits homes where proper treatment is not given in her absence, reports these cases and their progress to the physician, accompanies children to the hospitals for clinics when necessary, and assists the doctors in operations."

In that city during the year 9,656 pupils in the primary and grammar grades were inspected. Out of this number the following cases were recommended for treatment:

Defective vision	509	Otorrhea	14
Trachoma	37	Enlarged tonsils	373
Blepharitis	51	Adenoids	187
Conjunctivitis	26	Tonsilitis	2
Defective hearing	63		

In addition to the above the special cases given below were also reported:

Decayed teeth	98	Malnutrition	2
Squint	24	Chalazion	2
Cleft palate	1	Eczema	5
Scabies	2	Dacryocystitis	1
Dental caries	134	Deflected septum	2
Poor nutrition	9	Pediculi	2
Spinal disease	1	Impetigo	6
Foreign body in ear	1		

These figures are given to indicate what conditions may be discovered in any system of schools under an efficient system of inspection, and doubtless portray the average situation. The diseases enumerated are in most cases such as materially retard the progress of the child in school, although such as yield readily to professional treatment. The result of their neglect is shown in both the quantity and quality of the pupils' work, hence their neglect counts materially against the achievement of the schools. Excluding the special cases

enumerated, there were 1,262, or 13.1 per cent of the number examined, needing treatment.

In the Johnstown (Pa.) schools during the year some preliminary examinations into the health condition of pupils in some of the districts were made. In all 728 pupils were examined. Of these, 157, or 21.7 per cent, had defective eyes, of whom only 1 per cent were provided with glasses; 8.6 per cent had defective ears; 17.9 per cent had troubles of the nose and throat, and 3.2 per cent had skin diseases. This shows a total—excluding the 1 per cent wearing glasses—of 38.3 per cent of the number examined who were affected with some malady for whose treatment no provision had been made.

An examination of school children made in St. Louis during the year showed that out of a total of 135,314 examined, 35,314, or 25.9 per cent, had defects of some kind. As in similar examinations, the greater proportion of these were the sufferers from defective eyesight.

A volunteer system of inspection was begun during the year in two of the Harrisburg schools under the auspices of the Visiting Nurse Association of that city. The association in offering its services outlined its purposes as follows:

1. To assist the teacher in observing such symptoms as forewarn or accompany contagious diseases.

To call attention to pupils who seem to suffer from eye strain, obstructed breathing passages, defective hearing, caries of teeth, etc.

To care for such small and discomforting things as cuts, bruises, and sprains at school, and to visit the homes for the purpose of giving instruction as to caring and preventing the presence of pediculosis, etc. Such children as need medical attention are to be referred to their family physician, if they have one. Those unable to pay are to be referred to the Poor Director's physicians or hospital dispensaries. Those who can pay a small fee and have no family physician are to be referred to one of the medical men who serve the hospital dispensaries. Thus we can aid in preventing children from being unduly kept from school or being a menace to others in school.

2. By friendly visiting the homes in the capacity of school nurses, to tactfully remedy bad conditions of sanitation in the homes and teach hygiene.

The following list includes the cities which have some form of inspection, either paid or voluntary, and performed by either physicians or trained nurses or both:

Albany, N. Y.[a]	Camden, N. J.	Fall River, Mass.
Andover, Mass.	Chelsea, Mass.	Grand Rapids, Mich.
Ann Arbor, Mich.	Chicago, Ill.	Harrisburg, Pa.[a]
Arlington, Mass.	Cincinnati, Ohio.	Hartford, Conn.
Asbury Park, N. J.	Covington, Ky.	Indianapolis, Ind.
Atlantic City, N. J.	Dallas, Tex.	Jersey City, N. J.
Baltimore, Md.	Dayton, Ohio.	Johnstown, Pa.
Bordentown, N. J.	Des Moines, Iowa.	Lancaster, Pa.
Boston, Mass.	Detroit, Mich.	Malden, Mass.
Brookline, Mass.	Elgin, Ill.	Marlboro, Mass.
Buffalo, N. Y.	Englewood, N. J.	Melrose, Mass.
Cambridge, Mass.	Evansville, Ind.[a]	Melton, Mass.

[a] Volunteer inspection.

Milwaukee, Wis.
Minneapolis, Minn.
Montclair, N. J.
Newark, N. J.
New Haven, Conn.
Newport, R. I.
New York, N. Y.
Ogden, Utah.
Orange, N. J.
Passaic, N. J.
Paterson, N. J.
Pawtucket, R. I.
Philadelphia, Pa.
Pittsburg, Pa.[a]
Plainfield, N. J.
Portland, Oreg.[a]
Providence, R. I.
Salt Lake City, Utah.
San Francisco, Cal.[a]
Seattle, Wash.
Syracuse, N. Y.
Waltham, Mass.
Washington, D. C.
Waterbury, Conn.
Wellesley, Mass.
Winchester, Mass.
Worcester, Mass.
Yonkers, N. Y.

HIGH SCHOOL FRATERNITIES.

One of the important problems of minor administration which has recently come before superintendents is that of the high school fraternity in its relation to the welfare of the student as well as to that of the school itself. It will doubtless be of interest to summarize recent action in this matter in the different communities in which the subject has become an issue.

In the first place, the legislatures in several States during 1907 took cognizance of the situation through the enactment of general laws seeking either to control or to abolish secret student organizations. Three very drastic laws of the latter type were those passed during the year by the legislatures of Indiana, Kansas, and Minnesota. They are as follows:

[Indiana: Ch. 278, p. 616, Acts 1907, approved Mar. 12, 1907.]

SECTION 1. *Be it enacted by the general assembly of the State of Indiana*, That the common schools of the State of Indiana, both elementary and high schools, shall be open to all children until they complete the courses of study in said common schools, subject to the authority of the teachers therein and to all the rules and regulations provided by the proper authorities for the government of such schools. It shall be unlawful for the pupils in any of the elementary or high schools of this State to form secret societies, fraternities, or other similar organizations in such schools; and the board of school commissioners or board of trustees of any school town or city, and the trustees of any school township, and the superintendent of any school are hereby required to enforce the provisions of this act by suspending, or, if necessary, expelling, a pupil in any elementary or high school who refuses or neglects to obey such rules or regulations or any of them.

SEC. 2. An emergency exists for the immediate taking effect of this act, and it shall be in force from and after its passage.

[Kansas: Ch. 320, pp. 493–494, Laws 1907, approved Mar. 9, 1907.]

SECTION 1. It shall be unlawful for the pupils of any high schools to participate in or be members of any secret fraternity or secret organization whatsoever that is in any degree a school organization.

SEC. 2. Any boards of education or board of trustees of county high schools are hereby authorized and empowered to deny to any student regularly enrolled in such high school who shall violate section 1 of this act any or all of the privileges of such high school or to expel such student for failure or refusal to comply with the requirements of this act.

SEC. 3. This act shall take effect from and after its publication in the statute book.

[a] Volunteer inspection.

[Minnesota: Ch. 149, pp. 163-164, General Laws 1907, approved Apr. 11, 1907.]

SECTION 1. That from and after the passage of this act it shall be unlawful for any pupil, registered as such, and attending any high school, district, primary, or graded school which is partially or wholly maintained by public funds, to join, become a member of, any secret fraternity or society wholly or partially formed from the membership of pupils attending any such schools, or to take part in the organization or formation of any such fraternity or society, except such societies or associations as are sanctioned by the directors of such schools.

SEC. 2. The directors of all such schools shall enforce the provisions of section 1 of this act, and shall have full power and authority to make, adopt, and modify all rules and regulations which in their judgment and discretion may be necessary for the proper governing of such schools and enforcing all the provisions of section 1 of this act.

SEC. 3. The directors of such schools shall have full power and authority, pursuant to the adoption of such rules and regulations made and adopted by them, to suspend or dismiss any pupil or pupils of such schools therefrom, or to prevent them, or any of them, from graduating or participating in school honors when, after investigation, in the judgment of such directors or a majority of them, such pupil or pupils are guilty of violating any of the provisions of section 1 of this act, or who are guilty of violating any rule, rules, or regulations adopted by such directors for the purpose of governing such schools or enforcing section 1 of this act.

SEC. 4. It is hereby made a misdemeanor for any person not a pupil of such schools to be upon the school grounds, or to enter any school building, for the purpose of "rushing" or soliciting, while there, any pupil or pupils of such schools to join any fraternity, society, or association organized outside of said schools. All municipal courts and justice courts in this State shall have jurisdiction of all offenses committed under this section, and all persons found guilty of such offenses shall be fined not less than two dollars, to be paid to the city or village treasurer when such schools are situated inside of the corporate limits of any city or village and to the county treasurer when situated outside of the corporate limits of any such city or village, or upon failure to pay such fine to be imprisoned for not more than ten days.

SEC. 5. All acts and parts of acts inconsistent herewith are hereby repealed.

There is considerable variation in the manner in which different cities have sought to meet the issue. Camden, N. J., has recently passed a regulation forbidding high school students from organizing any kind of society or issuing any publication without permission from the board of education. It is also provided that all clubs, associations, and publications shall be under the supervision of principals in such manner as the superintendent may approve. Violation of the regulation renders the student liable to suspension or dismissal.

The board of education of Reading, Pa., adopted rules during the year denying public recognition to any secret or other school society not having a charter from the faculty of the school. Members of societies not so chartered are made ineligible for any office in any school organization, or the staff of any school publication, or to represent the school in any intellectual or athletic contest, or in any public manner. Students to be eligible for any of the above offices must certify that they are not members of any secret society. Parents are asked to cooperate with the board in this action against associations of this kind.

The now well-known Seattle case, decided in 1906, in which a student sought to restrain the board from denying to him certain privileges of the school because of his connection with a fraternity has played an important part in the movement against secret societies. In this case the supreme court of the State affirmed the decision of the lower court in favor of the board, and thus established the principle, in that State at least, that a board has unquestionable authority to withhold all privileges except attendance upon classes from any student disobeying the regulations of the school.[a]

A special committee of the Syracuse (N. Y.) Board of Education made a comprehensive study of the fraternity question from the local standpoint during the year. In the course of the investigation the high school faculty and the fraternity were given separate and also joint hearings. The following report of this committee, which was published in the Syracuse school report for 1906–7, will doubtless prove suggestive to boards and superintendents having this matter under discussion:

A consideration of high school secret societies involves two questions: First, the effect of the societies upon the members themselves; second, the effect of the societies upon the high school in general.

As regards the first, it is clear that many of the societies have been organized with the idea of meeting legitimate social demands of high school life, and supplementing the regular high school work by proper exercises in debate, speaking, and other forms of intellectual development. As regards the members the societies can not be wholly condemned, as many of them are doing beneficial work, but it is evident that some of them have often tended to take up the time and interests of students that should have been given to the regular high school work; have tended to stimulate unnecessary and improper expenditures, produce undesirable habits, and, in some cases, have caused serious injury to good morals. Upon the whole, it is apparent that, as a rule, high school students are too young to make it desirable for them to organize into secret societies which hold their meetings apart from the supervision of parents and teachers.

Supervision by teachers is impossible because, from the very character of the societies, they can not properly be given a place in a public school building or have assigned to them the special services and care of teachers who are employed to give their time and efforts alike to all students regardless of society or other affiliations. It is also clear that if they could properly be brought into the school building, there would be no rooms adapted for the club uses which the societies deem essential.

As regards the effect of the societies upon the high school in general, we are obliged to unqualifiedly condemn them as undesirable and injurious. They accentuate the clique spirit, produce objectionable methods in class and school elections, unduly emphasize social life as against excellence in school work, tend to subvert school discipline and to break down the democratic spirit which should be fostered in every public school.

We ask parents, guardians, and all who have influence with high school students to use all proper means to influence them to refrain from connecting themselves with high school secret societies.

We approve of societies organized and conducted by high school students in such a way as to properly supplement the regular high school work, develop self-control,

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[a] For the complete text of this decision see Bulletin No. 3, Bureau of Education, 1906, State School Systems.

independence of thought and action, and to meet the proper social demands of the student life, provided such societies are approved as to their organization by the high school faculty, and shall hold their meetings in the high school building, open to the attendance of such high school teachers as may be assigned to supervise them.

The debarment of fraternity members from participation in honors or offices has been the method chosen by a number of cities. Omaha, Nebr., does not permit members of a secret society to hold office in the battalion of cadets, to participate in a class organization or literary society, or to enter into any contest with other schools. Other cities which have recently taken a similar step are Columbus, Ohio, and Sedalia, Mo. Chicago requires a pledge upon entrance to the high school to the effect that the student is not a member of a fraternity, sorority, or other secret society and will not become a member.

The cooperation of the parents with the school authorities has been sought in some instances with good results. This was notably so in Pueblo, Colo., where parents were asked to forbid their children from joining secret societies. The fraternities were urged, too, by the board to agree to make no further initiations, to which all agreed but two, and the members of these were promptly suspended from school. At Boulder, Colo., a like course was pursued, with the result that the fraternities disbanded.

Several legal contests have arisen as a result of the recent legislative enactments and board regulations aimed at the control or suppression of high school secret societies. Among these was a recent case in Minneapolis, where mandamus proceedings were brought against the board to compel the reinstatement in his class of a senior who had been expelled from the high school because of his refusal to discontinue his fraternity connections. The action hinged on the right of the board to expel a student who was a member of a fraternity prior to the enactment of the State law, for participating in his society contrary to the rules of the board made under authority of the State law, the plaintiff contending that the law was applicable only to those joining secret societies after the passage of the act, and was not retroactive in its effect. That the board had acted within its legal rights in expelling the student was upheld by the district court and a mandamus order for the student's reinstatement was refused. The case will be taken to the supreme court. The judge before whom the case was tried, in handing down the decision, made some interesting comments upon the powers and duties of boards. The following excerpts will indicate the reasons on which he based his opinion:

It stands admitted that the plaintiff has violated the above rule or regulation, refuses to discontinue his relations with the said society to which he belongs, and his parents now appeal to the court to prevent his being disciplined or punished for such disobedience. The court is asked to set up its judgment and wisdom against the judgment and wisdom of the board. In other words, the court is asked to run a

race of opinion with the school board as to what is wisest and best for the control and management of the school and the school children, when the exercise of such functions and powers is the very thing committed by the legislature to the board.

There can be no longer any question that the power of the school authorities over the pupils is not confined to the schoolroom or the grounds, but extends to all conduct on the part of the pupils which is detrimental to the good order and best interests of the school, whether committed in school hours, or while the pupil is on his way to or from school or after he has returned home. Behavior of the pupil between school hours which tends to unfit him for study, or the effects of which, reaching the schoolroom, tends to disrupt discipline, breed insubordination, and the like, may and ought to be forbidden. All reasonable rules and regulations, therefore, designed and fairly tending to discourage and prevent such behavior, generally, in the pupils, should be observed by children and enforced by both parents and school authorities, and this, although it may be in individual cases at the sacrifice of some wholly harmless and innocent privileges.

The school management stands in loco parentis, and it is to be expected that some liberties must be relinquished to the school management in exchange for the advantages of a free education, and in considering the reasonableness of any particular rule the interests of the few must yield to that of the many. What may fairly appear to be beneficent and wholesome legislation for the discipline and management of 2,000 children in a single school should not be set aside simply because a mere handful of them deem such legislation as burdensome, oppressive, and unnecessary as to themselves.

Other places which have recently dealt with the subject are Des Moines, Iowa; Columbus, Ind.; Los Angeles, Cal.; Madison, Wis.; Springfield, Ill.; Wichita, Kans.; Bloomington, Ind.; Marshalltown, Iowa; Kokomo, Ind.; Salt Lake City, Utah, and East Orange, N. J.

Appended are the titles of recent articles and reports upon the subject.

Keller, P. G. W. Open school organizations. School review, 13: 10–14, January, 1905.

Morrison, G. B. Report of the committee on secret fraternities. National education association. Journal of proceedings and addresses, 1905, p. 445–451.

——— Social ethics in high school life. School review, 13: 361–70, May, 1905.

Questions regarding fraternities in secondary schools. School review, 12: 2–3, January, 1904.

Smith, S. R. Report of the committee on the influence of fraternities in secondary schools. School review, 13: 1–10, January, 1905.

Wetzel, A. Student organizations in a high school. School review, 13: 429–433, May, 1905.

Whitcomb, C. T. C. Report on organizations among high school pupils. *In* Massachusetts board of education, 69th annual report, 1904–5, p. 180–198.

EDUCATION OF THE DEAF IN DAY SCHOOLS.

The laws of several States make provision for the education of deaf children in day schools. An Ohio law, passed in 1906, provides for the establishment, by school districts, of day schools for the instruction of deaf persons over 3 years of age, the cost being payable from the common school fund to the extent of $150 for each pupil attending nine months. A minimum attendance of three pupils is necessary for the establishment of a school under this act, but a pupil may attend school in another county if there is no such school in the county of

his residence. The law provides for the employment of specially trained teachers and designates the oral method as the one to be employed.

Pennsylvania as far back as 1876 passed a law providing for the establishment of special schools for deaf mutes in districts having a population of 20,000 or more, and eight or nine deaf children, but, according to the report of the State superintendent of public instruction for 1906, this law has remained practically a dead letter.

In Wisconsin during 1906 there were 20 day schools for the deaf. The average cost per pupil enrolled was $122.39. The following quotations from the report of the State superintendent, 1906, indicates the status of these schools:

> The steady increase of the day schools, their increasing popularity throughout the State, and the quality of work they are doing, leaves no question as to their efficiency. They are no longer in the "experimental" stage, but are a vital part of the public school system.
>
> * * * These schools not only benefit the deaf, but they are a distinct gain to the community because they develop the altruistic spirit which seeks to lighten the burden of those who are unfortunate, and to reach out a helping hand to them, rather than to set those who are afflicted aside as an entirely distinct class.
>
> By housing the deaf children in the same building with the hearing, they are brought into daily contact with them, a benefit that can not be overestimated, as the great aim in the training of deaf children is to fit them to lead useful lives among a world of hearing and speaking people. It has been proven that the mind of the deaf child is not inferior to that of the hearing. * * * The day schools in Wisconsin have demonstrated that education may do for the deaf child just what it does for the hearing. * * *
>
> Particular effort is made in these day schools to give the deaf boys and girls the advantages of manual training; 60 per cent of the pupils in these schools have regular manual training under expert direction. Ninety-five per cent have the lighter forms of hand work, such as sewing, embroidery, weaving, drawing, and painting. Where domestic science is established in the city schools, the deaf girls enjoy all the privileges of the class.

New York City, which has not heretofore made provision for this class of defectives, lately established a school for the deaf and dumb. The superintendent's report for 1907 stated that a principal had been selected and a list of eligible teachers prepared, and that the school would be opened as soon as the building could be equipped.

There are 4 cities in California, 4 in Illinois, 1 in Massachusetts, 12 in Michigan, 1 in Missouri, 5 in Ohio, 1 in Washington, and 14 in Wisconsin where instruction for the deaf forms a regular part of the city school system. There were in all 129 teachers and 1,032 pupils, making an average of 8 pupils to a teacher. The oral method of instruction was followed for 973 pupils.

The following gives the statistics of pupils enrolled and the teachers engaged in their instruction in day schools for the deaf in cities and villages:

Teachers and pupils in day schools for the deaf, 1906–7.

City.	Teachers.	Pupils enrolled.	Number of pupils taught by oral method.
CALIFORNIA.			
Los Angeles	2	25	23
Oakland	1	15	15
Sacramento	1	6	6
San Francisco	2	25	25
ILLINOIS.			
Aurora	1	6	6
Chicago	25	233	233
Moline	1	6	2
Rock Island	1	9	9
MASSACHUSETTS.			
Boston	15	165	165
MICHIGAN.			
Bay City	1	11	11
Calumet	1	10	10
Detroit	9	51	51
Grand Rapids	2	19	19
Iron Mountain	1	6	6
Ishpeming	1	8	8
Kalamazoo	1	8	8
Manistee	1	8	8
Menominee	1	5	5
Saginaw	1	7	7
Sault Ste. Marie	1	6	6
Traverse City	1	9	9
MISSOURI.			
St. Louis	4	44	8
OHIO.			
Ashtabula	1	6	6
Cincinnati	6	31	25
Cleveland	9	62	62
Dayton	1	6	6
Elyria	1	5	5
WASHINGTON.			
Seattle	2	15	15
WISCONSIN.			
Appleton	1	9	9
Ashland	2	10	4
Eau Claire	4	25	25
Fond du Lac	2	14	14
Green Bay	2	22	22
La Crosse	1	6	6
Marinette	1	7	7
Milwaukee	11	75	75
Oshkosh	1	9	9
Racine	6	20	16
Sheboygan	2	12	12
Stevens Point	1	10	10
Superior	2	14	13
Wausau	1	7	7

FOURTH CONFERENCE OF SUMMER CAMPS FOR BOYS.

[Compiled from the Report for 1905-6 of the Secretary, Winthrop Tisdale Talbot, M. D., Holderness, N. H.]

The Fourth Conference of Summer Camps for Boys was held on Wednesday, April 26, 1905, in the rooms of the Twentieth Century Club, Boston. All leaders of summer camps and those interested in summer outings for boys were cordially invited to be present and participate in the discussions.

The organization of the conference is of the loosest description. A constitution of very simple character was adopted at the third conference. There is a president, a secretary and treasurer, and six directors, two from the private, two from the settlement, and two from the Young Men's Christian Association camps. The design is to include other types of camps as they come into existence. There is no membership fee. Anyone who is known to be interested in camps and can be reached is invited to be present. The expenses of the conference were met by a few who were interested enough to contribute. The main expense was for postage and printing. "The whole thing is an experiment. It is the second large conference we have held."

Each succeeding conference has been the means of spreading information concerning means and methods and arousing interest in the subject. Many new camps were started the preceding summer and more are projected. "No work done to-day by schools in their nine months annually with regard to children's health, physique, and strength equals what is done by the camps in the short weeks of summer." It is proposed to agitate for the establishment of municipal camps under the direction of superintendents of education.

The secretary has been following with much interest the development of the idea of the winter camp, inaugurated eight years ago. There are now several winter camps, all producing striking results physically, morally, and mentally in the boys under their care. The statement is made that "it has been proved that in the winter camps a boy can do in four hours daily better book work than he ever did at school in a session of five hours daily with two hours of home study."

The secretary estimated the number of organized camps for boys at three or four hundred, with more than 20,000 boys under canvas. The number of Young Men's Christian Association camps was not less than 200. In the private camp there is more freedom of management, so that it serves in a way as an experiment station. Unfortunately, private camps are too often money-making enterprises. The settlement houses and associations, charitable associations, and churches have now taken up the summer camp as an integral part of their work.

As to the purpose and functions of outing camps, the secretary has the following to say:

I think perhaps I have said enough to cause us to realize in some measure that the whole matter of outings in the summer time is growing very rapidly in scope. The time is at hand when it behooves us to consider what way these efforts are tending; whether these boys are simply going to be given a good time or whether we are going to utilize every day of these wonderful summers that we have—the opportunity that this New England climate, in spite of its vagaries, gives boys for improving morals and physique, and for stimulating an interest in nature.

At first the only idea was to give boys a good time in the summer and keep them from harm. Then the idea came to have the boys see the common things about them—natural history came in. Now we are giving attention to the making of things with the hands—paddle, canoes, all sorts of things that boys want to make. There are three fields—development of character and physique, the study of nature, and working with the hands—that have come to be accepted, I think, as proper fields for camp work. The proper scope for camp education is a pertinent subject. Personally, I believe that the knowledge of the farm comes distinctly under the work of the camp; that the camp is very much better conducted, if there is a farm in connection with it. The farm can be made to pay in part for the expenses of the camp. This has been very thoroughly worked out by Mr. Hinckley, of the Good Will Camp, in Maine. In other words, this whole topic is timely at this time in our discussions, and as we meet socially I would suggest that we turn our thoughts somewhat to the philosophy of camps and their tendencies. What do we want for these boys? What are we going to do with these boys? What are are our ideals? It is an important subject at just this juncture, because there are so many new camps being started, and a good many of those who are

starting these camps have little knowledge of what has been done in other camps. If by the printed report of this conference, and by talking with each other, we can get into better acquaintance with one another's work, then certainly our conference will not have been in vain.

The president of the conference, Col. Thomas Wentworth Higginson, delivered the opening address. One point that he made was that camp duties should not monopolize the whole of the summer; that there should be a portion of the time, two or three weeks, when the boy should be left to himself to follow his own promptings and learn the lesson of self-reliance.

Principal Edwin DeMerritte, of the DeMerritte School, Boston, and director of a private camp at Holderness, N. H., delivered an address on Camp Ideals and Standards. Other addresses were by President G. Stanley Hall, of Clark University, on Some Aspects of Summer Education; Prof. Theodore Hough, director of the school of science, Simmons College, on Camp Problems in Personal Hygiene; Charles E. A. Winslow, biologist in charge of the sanitary research laboratory of the Massachusetts Institute of Technology, on Camp Sanitation.

The question was discussed of establishing, in the neighborhood of cities, camps for young workingmen, who could spend there their nights, Saturday afternoons, Sundays, and vacations. One such camp was reported as in process of being organized.

President Henry B. Sawyer, of Hale House, Boston, presented an outline of a system of keeping camp accounts.

The meetings of the conference have been held at intervals of two years. The next meeting was appointed for June, 1907.

The Boston office of the conference is at the quarters of the Massachusetts Civic League, 4 Joy street. There, in the town room, will be found a shelf devoted to camp literature and information. The town room is freely open to the public. The secretary will assist the authorities of any public library who desire to procure camp literature.

Mr. E. M. Robinson, international secretary of the boys' department, Young Men's Christian Association, furnished the following "partial list of associations conducting camps last year:"

CAMPS.

Place.	Total attendance.	Place.	Total attendance.
St. John, New Brunswick		Peterboro	40
New Glasgow, Nova Scotia	3	Toronto, West End	72
Sydney, Nova Scotia	22	Quebec	25
Westville	2	Montreal	200
Belleville, Ontario	42	Charlottetown, Prince Edward Island	5
Hamilton	35	Sherbrooke	16
Kingstown	4	Berkeley, Cal	8
London	42	Fresno	40
Ottawa	30	Pasadena	51
Pembroke	34	Redlands	35

Place.	Total attendance.
Riverside	48
Sacramento	41
San Diego	19
San Francisco	174
Mission Branch	10
Colorado Springs, Colo	32
Denver	37
Ansonia, Conn	4
Bridgeport	30
Hartford	35
Stamford	5
Washington, D. C	26
Augusta, Ga	20
Columbus	13
Macon	21
Savannah	32
Waycross	15
Honolulu	18
Aurora, Ill	19
Bloomington	18
Chicago, West	50
Elgin	52
Evanston	64
Galena	13
Kankakee	16
Rockford	35
Springfield	31
Indianapolis, Ind	44
Clinton, Iowa	6
Des Moines	53
Fort Dodge	20
Independence	20
Muscatine	32
Oskaloosa	20
Ottumwa	21
Sioux City	25
Leavenworth, Kans	21
Newton	25
Winfield	45
Louisville, Ky	55
Maysville	12
New Orleans, La	20
Bangor, Me	20
Baltimore, Central Md	150
Baltimore, West Branch	15
Frederick	18
Abington, Mass	15
Boston	271
Brockton	28
Chelsea	9
Everett	28
Fall River	105
Holyoke	12
Lawrence	10
Lowell	32
Lynn	15
Newburyport	20
North Adams	15
Pittsfield	19
Quincy	5
Salem	55
Southbridge	54
Springfield	80
Westfield	20
Winchester	14
Worcester	60
Battle Creek, Mich	18
Calumet	20
Coldwater	7
Detroit	40
Grand Rapids	36
Hancock	34
Jackson	21
Pontiac	27
Saginaw	25
Duluth, Minn	57
Minneapolis	42
Springfield, Mo	21
Hastings, Nebr	22
Lincoln	24
Manchester, N. H	3
Camden, N. J	25
Jersey City	39
Lakewood	161
Madison	4
Hudson, N. Y	10
Jamestown	93
New Rochelle	17
Harlem, New York City	75
Washington Heights	18
North Tonawanda	10
Rochester	55
Syracuse	22
Troy	15
Troy, north end	15
Utica	50
Waterford	25
Watertown	5
Charlotte, N. C	21
Cincinnati, Ohio	120
Cleveland, central	35
Cleveland, west side	53
East Liverpool	19
Lima	45
Newark	40
Painesville	15
Piqua	15
Springfield	12
Youngstown	20
Portland, Oreg	25
Butler, Pa	12
Clearfield	19
Coatesville	12
Du Bois	14
Easton	61
Hazelton	12
Kane	18
Lancaster	37
Lebanon	6
Lock Haven	30
Milton	8
New Castle	65
New Kensington	19
Oil City	18
Philadelphia, central	50
Philadelphia, Kensington Branch	26
Philadelphia, west	47
Philadelphia, East Liberty	19
Pittsburg	18
Pottsville	20
Sewickley	26
Shamokin	29
Sharpsburg	9
Williamsport	32
York	26
Montclair	17
Newark	16
New Brunswick	39
Passaic	24
Paterson, N. J	11
Plainfield	42
Ridgewood	23
Summit	10
Trenton	29
Addison, N. Y	10
Albany	44
Binghamton	18
Brooklyn, Bedford Branch	67
Brooklyn, Central	166
Brooklyn, Twenty-sixth Ward	181
Buffalo, Central	137
Clifton Springs	1
Cohoes	2
Cornellsville	25
Bristol, R. I	10
Newport	20
Pawtucket	51
Woonsocket	8
Charleston, S. C	16
Bristol, Tenn	16
Chattanooga	20
Knoxville	60
Morristown	1
Nashville	19
Austin, Tex	1
Burlington, Vt	71
Montpelier	20
Portsmouth, Va	9

Place.	Total attendance.	Place.	Total attendance.
Richmond	34	Racine	21
Staunton	53	Wausau	9
Everett, Wash	21	Stratford, Ont	53
Seattle	66	Ashland, Ky	30
Grafton, W. Va	7	Plattsburg, N. Y	66
Green Bay, Wis	2	Pa. R. R., Pa	186
Janesville	29	Cleburne, Tex	32
Kenosha	19	Palestine, Tex	1
La Crosse	81	Milwaukee, R. R	4
Marinette	23		
Milwaukee	60	Total	14,436
Ashland	18		

NEW EDUCATIONAL ASSOCIATIONS.

1. NATIONAL SOCIETY FOR THE PROMOTION OF INDUSTRIAL EDUCATION.

The National Society for the Promotion of Industrial Education was organized in New York City, November 16, 1906. The objects of the society are "to bring to public attention the importance of industrial education as a factor in the industrial development of the United States; to provide opportunities for the study and discussion of the various phases of the problem; to make available the results of experience in the field of industrial education both in this country and abroad, and to promote the establishment of institutions for industrial training." The society meets annually. The first president of the society was Dr. Henry S. Pritchett, of New York City. He was succeeded at the annual meeting held in Chicago in January, 1908, by President Carroll D. Wright, of Clark College, Worcester, Mass. The secretary is Dr. James P. Haney, New York City. The society had published to October, 1907, four bulletins, as follows: No. 1, Proceedings of the organization meetings; No. 2, Selected bibliography on industrial education; No. 3, A symposium on industrial education; No. 4, Industrial training for women.

2. AMERICAN SCHOOL HYGIENE ASSOCIATION.

On May 6–7, 1907, there was held in Washington, D. C., the first annual congress of the American School Hygiene Association. The purpose of the association is "to stimulate research and to promote discussion of the problems of school hygiene," and "to take an active part in movements wisely aiming to improve the hygienic conditions surrounding children during school life." The officers are as follows: President, Dr. Henry P. Walcott, Cambridge Mass.; vice-president, Dr. Arthur T. Cabot, Boston Mass.; secretary-treasurer, Dr. Thomas A. Storey, New York City. The next meeting will be held in Atlantic City, N. J., April 17–18, 1908.

GIFTS FOR EDUCATION.

The value of benefactions received by educational institutions is given in the chapters devoted to the several classes of institutions. In addition to those benefactions there were made during the year a number of notable gifts in aid of education.

On February 7, 1907, Mr. John D. Rockefeller added $32,000,000 to the funds of the General Education Board, which, was organized February 27, 1902, and incorporated by an act of Congress approved January 12, 1903. The secretary of the board is Dr. Wallace Buttrick, New York City.

April 23, 1907, Miss Anna T. Jeanes, of Philadelphia, Pa., gave $1,000,000 in aid of rural schools for negroes. The administration of the fund has been placed in the hands of a board of trustees, of which Dr. James H. Dillard, of New Orleans, La., is president.

March 12, 1907, Mrs. Russell Sage donated to the Sage Foundation the sum of $10,000,000 for social betterment.

April 5, 1907, Mr. Andrew Carnegie added $6,000,000 to the endowment fund of Carnegie Institute, Pittsburg, Pa.

TEACHERS' PENSIONS IN THE UNITED STATES.

MASSACHUSETTS.

In an article on "The Status of the Massachusetts Teacher," contained in the Seventieth Annual Report of the Massachusetts Board of Education, the various forms of pensions for teachers in Massachusetts are enumerated. After describing the pension system in Harvard University, the author continues:

> The system at Harvard was in existence before Mr. Andrew Carnegie's great gift, but is now, of course, suppiemented and strengthened by that private benefaction. Other undenominational colleges in the State of Massachusetts also receive their proper share of Mr. Carnegie's gift. This magnificent gift has been extraordinarily effective in several ways: (1) It has made the compensation of college professors more nearly adequate. (2) It has made suitable provision for the college professor's old age and illness. (3) It has improved the teaching staff of the colleges by the removal of professors who had already worked too long and too hard, and who long ago were entitled to a well-earned rest. (4) It has made the position of college professors more honorable and more attractive. (5) It has enabled college professors to live under more humane conditions with regard to proper expenditures.
>
> Of the other forms of pensions for teachers in Massachusetts the most important are those of (1) The Boston Teachers' Retirement Fund Association. (2) The Boston Teachers' Mutual Benefit Association. (3) The Teachers' Annuity Guild of Massachusetts.
>
> I. The Boston Teachers' Retirement Fund Association, according to the last report, has a fund of $189,689.84. It has at present 1,885 contributing members and 95 annuitants, a total of 1,980 members. The sources of income are: (1) Reservations from the salaries of contributing members, $18 a year from each person, deducted bimonthly from the salaries. (2) Payments in full by annuitants, in order to become entitled to

annuities. (3) Interest. (4) Legacies. Annuities and refunds are managed in the following way: Annuities are granted upon application to members retiring from the service, who have taught thirty or more years in the aggregate, including ten or more years in Boston public schools; also to members retiring from the service on account of inability, who have taught two or more years in Boston public schools. (In 1906 the amount of annuity was $180.) Refunds are granted to retiring members who are not claimants to annuities, three months after retirement. The amount paid them is one-half of the total amount paid into said fund.

II. The Boston Teachers' Mutual Benefit Association is open to "all teachers in the employ of the city of Boston." The treasurer's statement for 1905 shows that the permanent fund consists of $113,614.13, and that the Robert Charles Billings fund amounts to $8,795.69. The amount paid annuitants in 1905 was $13,475.91. In January, 1905, the total membership was 905, and the number of annuitants was 128. The assessment is 1 per cent of the yearly salary, paid in quarterly installments, except on salaries exceeding $1,000; on such excess one-half of 1 per cent is paid, but no yearly assessment exceeds $20. The annuity paid is $111.

III. The Teachers' Annuity Guild of Massachusetts has a total membership of 1,119, including 120 annuitants. These annuitants are divided into three groups, known as the $1,000, the $750, and the $500 groups. The annual assessments are $16, $12, and $8 for each group, respectively. The annuities paid are $138, $103.50, and $69 for each group, respectively. The guild has a permanent fund of $100,000, but, as the annuities show, needs much more money. This guild has members in 18 cities and towns of Massachusetts.

Pension legislation in Boston.—The school committee of Boston has appointed a special committee to devise an adequate scheme of pensions, and to prepare a bill embodying the results of their investigations. It is therefore highly probable that Boston will have in the near future an admirable system of pensions.

THE THREE SYSTEMS OF PENSIONS.

Prof. C. H. Keyes reports in an address to the National Education Association on teachers' pensions, as follows:

Three general plans have been advocated and put in operation:

First. Bodies of teachers bent on providing for disabled veterans of the schoolroom have formed teachers' retirement associations, teachers' guilds, and teachers' annuity associations. They have provided small annuities for aged and worthy teachers by assessments of their own membership, increased by donations of philanthropic individuals, and in some instances by small legislative appropriations. The retirement-fund department of the New Jersey State Teachers' Association, the Connecticut Teachers' Annuity Guild, and the Boston Teachers' Retirement Fund Association are good examples of these movements of which there have been many throughout the Union. They have not furnished, nor can they ever hope to furnish, complete and satisfactory disposal of the problem. Looked at as final agencies, they are subject to all the vicissitudes attaching to voluntary fraternal insurance societies with amateur managements. Some teachers support them as well-meaning philanthropies, but even the school-teacher seeking old age protection that is really insurance knows enough to send her money to Hartford for the purchase of the real article. But these associations have done their greatest work in securing the adoption of other plans for more adequately solving the problem. In fact, all the rational teachers' pension legislation on the statute books of American commonwealths has been secured largely if not entirely through the influence of these teachers' organizations.

Second. Progressive cities in various quarters of our country have established, under legislative sanction, retirement funds for their own teachers. New York, Philadelphia, Detroit, and San Francisco furnish the best examples of this second

scheme. Percentages of teachers' salaries, deductions on account of teachers' absences, and donations form the major portion of the fund in all these places except in the city of New York, where the foregoing sources are largely increased by the addition of 5 per cent of all the excise moneys and fees for liquor licenses received by the city. Under these different city plans, maximum annuities vary from $150 a year up to $2,000 a year, this latter sum being provided by the city of New York, where the lowest annuity is equal to half the salary paid at the time of retirement.

Third. A few States have enacted general pension laws for the benefit of all of these teachers. Of these, Rhode Island and New Jersey have formulated the most generous and most equitable statutes. New Jersey provides the bulk of her fund by deduction of from 2 to 3 per cent of the salaries of all teachers. The annual pension amounts to three-fifths of the average annual salary for the last five years of teaching, but it can not be less than $250 or more than $650.

The Rhode Island law is the most generous, and in its principle the soundest yet enacted. It squarely accepts the whole responsibility for the State, whose schools are to be benefited, and does not require the teachers to furnish any part of the fund. The defect of this law consists in the smallness of the sum appropriated and the absence of any provision for making the appropriation continuous.

Maryland should be mentioned in this connection. The State assumes the payment of annuities to retired teachers. (See law quoted in Annual Report of 1906, p. 216.) The Rhode Island teachers' pension law is quoted here in full, having been passed only recently (Jan., 1907).

THE RHODE ISLAND LAW.

An Act providing for the pensioning of school-teachers in this State.

It is enacted by the general assembly as follows:

SECTION 1. Any person of either sex who on the passage of this act or thereafter shall have reached the age of sixty years and who for thirty-five years shall have been engaged in teaching as his principal occupation, and have been regularly employed as a teacher in the public schools or in such other schools within this State as are supported wholly or in part by State appropriation, and are entirely managed and controlled by the State, twenty-five years of which employment including the fifteen years immediately preceding retirement shall have been in this State, may at the expiration of a school year, unless his private contract with his employer shall otherwise provide, be retired by his employer or voluntarily retire from active service, and on his formal application shall receive from the State for the remainder of his life an annual pension equal to one-half of his average contractual salary during the last five years before retiring, but in no case shall such annual pension be more than five hundred dollars: *Provided, however*, That no such employment as teacher within this State after this act shall be included within its provisions, unless the teacher shall hold a certificate of qualification issued by or under the authority of the State board of education.

SEC. 2. The State board of education shall make all needful regulations for issuing certificates of qualification and carrying into effect the other provisions of this act not inconsistent with the act itself and shall examine into and determine the eligibility of each and every applicant to receive a pension under the provisions of this act.

SEC. 3. For the purpose of carrying this act into effect the sum of ten thousand dollars, or so much thereof as may be necessary, is hereby appropriated out of any money in the treasury not otherwise appropriated, and the State auditor is hereby directed to draw his orders on the general treasurer in favor of such persons and for such sums as shall be certified to him by the State board of education, according to the provisions of this act.

SEC. 4. This act shall take effect on the first day of January, 1908.

PENNSYLVANIA.

Though the city of Philadelphia has had a pension fund for teachers for a number of years, the State Association of Public School Teachers of Pennsylvania is now petitioning the legislature to enact a pension law for the entire State. The bill this association has prepared reads as follows:

That from and after the passage of this act public school teachers, principals, supervisors, and superintendents who have taught in the public schools not less than thirty years, twenty of which shall have been in the public schools of the Commonwealth of Pennsylvania, may be retired upon an annuity equal to one-half the average annual salary received by such teachers, principals, supervisors, and superintendents during the five years of employment immediately preceding the date of retirement, which employment shall have been in the State of Pennsylvania, provided the annuity paid shall not be less than $200 or more than $600 in any one year.

Before any teacher shall be entitled to an annuity under this act it is necessary for the boards of education, boards of directors, or boards of controllers by whom the said teacher has been employed to certify under the seal of said boards or through satisfactory information the length of time that such teacher has taught in the public schools of their respective districts.

Said certificates and information shall be forwarded to the superintendent of public instruction and thereupon such teacher shall be entitled to the aforesaid annuity.

If any teacher retired on the provisions of this act shall be reemployed as a regular teacher by any school district, then such annuity shall cease, provided that after such reemployment cease the said annuity may be restored according to the provisions of this act.

All annuities provided for by this act shall be paid out of the State treasury upon warrants properly drawn upon the State treasurer by the superintendent of public instruction.

The superintendent of public instruction is directed to set apart out of the general school appropriation a sum equal to the amount required to carry out the provisions of this act of assembly.

WISCONSIN.

Wisconsin also has recently enacted a teachers' pension law resembling that of Ohio. The New York School Journal says on this subject:

Milwaukee teachers are naturally much pleased with the law providing for a retirement fund. There is, however, one provision which, upon the face of it, can not be enforced without serious injustice:

"No teacher who is a contributor to said fund (the retirement fund), and whose position has become permanent by virtue of successful probation, shall be removed or discharged by the board of education except for cause upon written charges. The teacher shall receive a copy of such written charges at least three days before the hearing thereof."

This would seem to mean that teachers who prefer not to contribute to the fund thereby forfeit the safety in their positions secured to them by the provisions that they shall not be removed "except for cause upon written charges."

Another provision reads: "All teachers not employed in cities of the first class at the time of the enactment of this law, who may be elected or appointed subsequent thereto, shall be bound by the provisions of this act when their respective appointments shall become permanent, as herein provided."

If contributing to the retirement fund be optional, how can "all teachers * * * be bound by the provisions of the act?"

While it would be interesting to have the interpretation put on these questions by the court, it would, according to general opinion, be much better to remove all doubtful points before the enactment of the law.

CINCINNATI.

The school teachers' pension fund of Cincinnati, operating under the laws of Ohio (sec. 3897 of the General School Law), had August 31, 1906, a permanent fund of $44,000. Its receipts during the year ending on that date amounted to $24,391.98; its disbursements amounted to $19,885.29, which left a balance of $4,506.69. Since September, 1900, a teacher of the city has donated $1,426.80. The State law of Ohio requires the board of education to pay into the pension fund 1 per cent of the amount received from local taxes, together with all deductions from salaries of teachers on account of tardiness or absence. The board of education, in its budget for 1907, has set aside the sum of $15,015 for this purpose, the amount being equal to 1 per cent of the estimated amount of local taxes for that year.

NEW JERSEY.

The teachers' pension law of New Jersey was quoted in the Annual Report of 1906 (p. 218). A report of the working of the retirement fund to the New Jersey State Teachers' Association, published by Miss Elizabeth A. Allen, the secretary of the fund, contains some interesting passages which may be of use to teachers in other States, and are therefore quoted here:

NEW JERSEY FUND FURNISHED BY THE TEACHERS.

Owing to the fact that public sentiment was, and is, bitterly adverse to the idea of "pensions from the public purse," legislation in New Jersey took the form of the first class, the funds being furnished by the contributions of teachers who, more or less "voluntarily," at the urgent solicitation of comrades, agreed to subscribe to the plan (and I firmly believe that our retirement fund is righteously founded; that the teachers themselves should be generous contributors to their retiring fund), but our experience seems to demonstrate conclusively that no purely voluntary plan of teachers' pensions is likely to succeed. A cooperative scheme can not succeed without cooperation—and steady, continual, and continuing cooperation. Therefore, we are not surprised to find that the much-contested "compulsory" clause in the New Jersey law is a "feature," indeed a "saving clause," in all recent legislation, the plan being:

(*a*) Optional, up to a date designated by the law, for teachers already in the service, after which date any such teacher failing to elect to come under the provisions of the law, is debarred from its benefits.

(*b*) Contractual obligations, whereby, on and after the designated period, every new teacher, by virtue of appointment to a position, becomes a contributor to the retirement fund. In electing to become a teacher, he or she elects to be governed by the law. * * *

The experience of the New Jersey teachers' retirement fund proves that many persons of mature age are either improvident, or that they have no surplus to save. Not a few of the beneficiaries of the retirement fund, after teaching twenty, thirty, or

forty years had not accumulated enough to pay the little deficit they owed the fund, often less than $100! The 190 teachers retired on annuity from our fund had taught an average of thirty-three years, and, after that lifetime of service, had attained to an average salary of $661.49, ranging from $258.80 to $2,380 a year. * * * There are 6,000 or 7,000 teachers now employed in New Jersey who are not members of the fund. * * * All teachers receiving their first appointment in New Jersey on and after January 1, 1908, become members of the retirement fund by virtue of such appointment, and I predict that the day will come when a multitude of those teachers will bless the law that compelled them to provide for the time when their earning capacity was gone.

In general, all [similar] enactments [in the United States] provide for a common fund from which any teachers, eligible by length of service and disability, may be retired upon annuity. The service required varies from fifteen to twenty years, coupled with disability, or from thirty, thirty-five, or forty years with or without disability. Some laws provide an age limit of from 60 to 70 years for both sexes; others put the retiring age at from 60 to 65 for women and from 65 to 70 for men. * * * Nor is this movement to establish age and disability insurance confined to the teaching profession alone. Since New Jersey teachers organized a plan of old-age and invalid insurance, the great railways have moved in the same direction, with the difference that the railroads contribute equally with their employees, and from the first administered the annuity fund at the expense of the corporation.

The New Jersey State treasurer's report for the fiscal year which ended on June 30, last, shows:

Receipts.

Members' dues	$35,095.19	
Interest	4,258.15	
Total		$39,353.34

Disbursements.

Annuities	35,624.55	
Rebates	117.14	
Expenses	652.14	
Total		36,393.83
Balance		2,959.51

Assets, June 30, 1907.

Investments	78,500.00
Cash in bank	15,108.72
Total	93,608.72

RESULTS TO DATE.

To date annuities have been granted to 190 teachers, to whom has been paid $174,366.10, representing an average annuity of $353.40. Of the 62 annuities declared since June 13, 1906, or since the "higher rates" went into effect, 7 were passed subject to the provisions of the act of 1896; 3 under the provisions of the acts of 1899, 1900, and 1902, respectively, while 15 accepted the act of 1906 and 35 the act of 1907. Four of the 35 paid in a "lump sum" the balance due the fund at the time of their retirement, and are in regular quarterly receipt of their annuities; the other 31 took advantage of the provisions of section 217, and authorized the board to withhold their annuity and credit the same to "unpaid dues," until the amounts so withheld shall satisfy the claims of the fund, after which annuities will go on free and clear. This feature of the act of 1907 commends itself to that large majority of New Jersey's veteran teaching force whose "savings" rarely amount in ready cash to a sum sufficient to meet even the very modest demands of the fund.

Condensed report of the New Jersey retirement fund to January 1, 1908.

Total number of annuities granted	190
Men	28
Women	162
Average annual value of annuities	$353.40
Total annuities paid	$174,366.10
Annuitants deceased	36
Average total paid to fund by deceased annuitants	$136.63
Average total received from fund by deceased annuitants	$932.47
Average age of deceased annuitant (years)	61
Number of living annuitants	154
Average annual salary for last five years of teaching	$661.49
Lowest salary	$258.80
Highest salary	$2,380.00
Applications for annuity pending decision	10
Receipts for fiscal year ending June 30, 1907	$39,353.34
Disbursements for fiscal year ending June 30, 1907	$36,393.83
Annuities paid for fiscal year ending June 30, 1907	$35,624.55
Assets (cash and investments) June 30, 1907	$93,608.72

Average period of teaching service in New Jersey at time of application for annuity, 33 years and 4 days.

ILLINOIS.

The legislature of Illinois passed (May 24, 1907) an act which provides:

(1) That neither the treasurer nor any officer, having the custody of public school funds of any city, having a population exceeding 100,000 inhabitants, shall be entitled to retain any interest accruing thereon or any part thereof, but such interest shall accrue and inure to the benefit of such school funds respectively, become a part thereof, and be paid into the city treasury, subject to the purposes of this act.

(2) The board of education of any such city, as to such funds raised by taxation, levied by such city for school purposes, whether the same be for educational or for building purposes, shall annually set aside all interest so added to such funds and contribute the same to the public school teachers' and public school employees' pension and retirement funds now created or existing, or such as may be hereafter created pursuant to any law. The amount of such interest so contributed, however, shall not exceed in any year 1 per cent of the sums so levied for such purposes.

INDIANA.

The State of Indiana created by act of March 9, 1907, teachers' pension funds for cities exceeding 100,000 inhabitants, which funds are administered by boards of trustees consisting of three members of the school board, the city superintendent of schools, one principal, and two teachers of such cities. As sources of these funds are mentioned (1) gifts and bequests (if in form of real estate, only the rents of such property to be used). (2) One per cent per annum of the salaries of teachers who have not yet taught fifteen years, but not to exceed $10;

2 per cent of the salaries of teachers who have taught fifteen years or longer, but not to exceed $15. These assessments are required of all teachers who have a salary of $450 or more, and in accepting employment such teachers are conclusively deemed to agree to pay the assessments. (3) A special tax levy of 1 cent upon each $100 of taxable property in the cities maintaining a pension fund. The funds must be invested in United States bonds, or in bonds of the State of Indiana or any other State, county, township, or city within or without the State of Indiana; they may also be invested in mortgages upon real estate up to 50 per cent of its value. The board of trustees of the pension fund shall establish a sinking fund, to the credit of which shall be put all gifts and bequests and the unexpended balance remaining at the close of each fiscal year. Such sinking fund shall remain a permanent fund, no part of which shall be expended except interest and income.

The pension fund thus maintained shall be used as follows: (1) To pay a maximum pension of $600 a year to any teacher in said cities who has taught forty years; and every beneficiary of the fund shall be entitled to and shall receive such a percentage of the sum of $600 as the number of years of service of said beneficiary shall bear to the term of forty years. (2) To pay upon application a disability pension to any aged, infirm, diseased, or disabled teacher who is now, or hereafter may be, teaching in the public schools of such city, having served not less than fifteen years. (3) To pay a pension without his application for the remainder of his life to any teacher who shall have taught not less than twenty-five years, provided he has contributed to the fund one-third of the amount of pension to which he is entitled per year; and in order to make up such one-third, the board of trustees may order the treasurer to deduct one-half of the pension of the first two years.

The law permits the board of trustees to count in the years of service, if they be less than five, rendered outside of the city maintaining a pension fund, provided that a special assessment be paid by such a teacher. A reexamination of a teacher after he has been pensioned by reason of disability, injury, or disease may be ordered by the board of trustees to ascertain whether the disability has been removed. In such a case the pension ceases. In cases where the maximum time has been spent in teaching no medical examination, nor reexamination, is necessary. In computing the time of service the board shall take into account the years of service before as well as after the passage of the law. One-half of the assessments paid by a teacher may be returned if he ceases to be a teacher before he is entitled to the benefits of the fund, provided he repay to the fund the amount thus received in case he again enter the profession of teaching in a city where such a fund is maintained.

If at any time there should not be sufficient money in the pension fund to pay all claims against it in full, then, and in such event, an equal percentage shall be paid upon all such claims to the full extent of the funds on hand, until such pension fund shall again be sufficient to pay all claims against it in full. The law makes the pensions paid exempt from seizure or levy upon attachment, execution, supplemental process, and all other process, whether mesne or final. Conviction of a felony or misdemeanor, however, cancels any pension claim. The term teacher is defined as follows: Any principal, assistant principal, assistant superintendent, supervisor, assistant supervisor, persons in charge of any special department of instruction, and any teacher or instructor regularly employed as such. (This seems to exclude the chief superintendent of the city school system.)

PENNSYLVANIA.

The legislature of the State of Pennsylvania passed an act (May 23, 1907) which provides (1) that the boards of school directors, school controllers, and central boards of education in school districts of the second and third class are authorized and empowered to establish and administer teachers' retirement funds. Such a fund shall consist of all funds available for like purposes at the time of the enactment of the law, together with such additions thereto as the boards may, from time to time, prescribe and such moneys as may be donated or bequeathed for such purposes. (2) Any teacher, principal, or supervising official retiring with the consent of the board shall receive from said fund such annuity as the board may prescribe.

TEACHERS' PENSIONS IN EUROPE.

The annual report of 1905 contained, on pages 209–215, a statement in tabular form of the pensions paid to elementary teachers and their widows and orphans in the various States of Germany. The table gave both the minimum and maximum amounts paid and the terms according to which pensions are computed. The following table, quoted from Rein's Encyclopädisches Handbuch der Pädagogik, gives similar facts in reference to the high or secondary schools of 25 States of Germany. Mecklenburg-Strelitz is omitted, but it is intimated that that State follows the practice of its neighboring State, Mecklenburg-Schwerin.

The same source gives the latest legislation in behalf of teachers' pensions in other European countries. Those not mentioned, chiefly countries in the east of Europe, pay no pensions to teachers.

Pensions paid to teachers of secondary schools in Germany.

States of the Empire.	Minimum pension.		Amount of pension in per cent of salary after—			Maximum pension.		Annual contribution.
	Begins after years—	Per cent of salary.	10 years.	25 years.	40 years.	After years—	Per cent of salary.	
								Per cent.
Prussia	10	33⅓	33⅓	58⅓	75	40	75	None.
Bavaria	4	70	70	80	90	.....	100	None.
Saxony	10	30	30	51	80	40	80	None.
Württemberg	10	40	.....	.....	92½	.....	92½	None.
Baden	10	30	30	52½	75	40	75	None.
Hesse	5	40	50	72½	90	50	100	None.
Mecklenburg	20	50	.....	55	75	50	90	None.
Saxe-Weimar	0	40	40	62½	80	36	80	None.
Oldenburg	0	50	50	65	80	50	90	None.
Brunswick	3	33⅓	40⅘	63⅓	85⅘	50	100	None.
Saxe-Meiningen	0	45	45	60	75	40	75	None.
Saxe-Altenburg	0	25	30	50	80	40	80	3
Saxe-Coburg-Gotha	0	40	40	62½	85	50	100	None.
Anhalt	0	33⅓	40⅘	63⅓	85⅘	49	100	None.
Schwarzburg-Rudolstadt	0	40	40	62½	80	36	80	2
Schwarzburg-Sondershausen	0	40	40	62½	80	37	80	None.
Waldeck	0	33⅓	50	66⅔	.....	25	66⅔	None.
Reuss, senior line	0	40	40	62½	80	37	80	None.
Reuss, junior line	0	40	40	62½	80	37	80	None.
Schaumburg-Lippe	10	30	30	45	70	45	80	None.
Lippe-Detmold	0	40	40	62½	80	37	80	None.
Lübeck	10	33⅓	33⅓	58⅛	75	35	75	None.
Bremen	10	40	40	70	80	30	80	None.
Hamburg	0	40	40	62½	85	50	100	None.
Alsace-Lorraine	10	25	25	50	75	40	75	None.

Austria.—Pensions for elementary teachers may begin after ten years of service; the amount at that time is 40 per cent of the salary, and increases 2 per cent a year; minimum pension is 800 crowns, or $162.40. If a teacher is incapacitated before he has taught five years, one and a half years' salary is paid him, and this releases the State from further payments. If he is incapacitated during the period from the fifth to the tenth year of service, he receives two years' salary, and thereby relinquishes all further claim upon annuity. Teachers' pensions are regulated by a general pension law for all civil State officers, only that three years' service of teachers are accounted as four years of other officials; hence while other officials must serve forty years to be pensioned with full salary, the teachers already reach this amount of annuity after thirty years' service. Teachers in secondary schools may resign when 65 years old and retire on a pension equal to the full salary of their last year of service; teachers who reach the age of 75 while in service must retire.

Hungary.—Teachers in elementary schools are entitled to a pension of 300 florins, those of advanced city schools 400 florins, at the sixty-fifth year of life, provided they have served forty years. In secondary schools teachers get 40 per cent of their salary if incapacitated after ten years of service. From that year the pension increases 3 per cent a year, so that after thirty years of service the full salary is paid if the teacher retires. But every teacher is obliged to contribute to the pension fund by paying one-third of one year's salary over and above 300 florins, also one-third of one year's increase of salary.

Switzerland.—During recent years a number of Cantons have revised the regulations in regard to pensions. In every case the latter were increased. This was made possible by a subsidy granted by the Federal Government amounting to 60 cents per capita of the population (80 cents per capita in some mountainous Cantons). The only difficulty in settling the pension claims of teachers is the fact that in most of the 25 Cantons of the Republic a teacher is elected for only ten years. In the majority of cases the teachers are reelected, but the people believe in rotation in office from the President, who serves only one year, down to the village constable. This circumstance makes it somewhat difficult to determine to just what amount of pension a teacher is entitled, having served perhaps in several Cantons, all of which have different rules in paying teachers' pensions. As an example, the legislative regulation of the Canton of Zurich may be quoted, which is one of the latest, passed July 31, 1906. The Canton pays as follows:

Years of service.	Primary schools.	Grammar schools.
30 to 35	$190 to $220	$250 to $260
36 to 40	220 to 240	260 to 280
41 to 45	240 to 280	280 to 320

To these amounts are added the pensions paid by the communities, so that in large cities the pension may amount to from $500 to $700. Teachers are in no case obliged to contribute to the pension funds. For secondary school teachers separate regulations are in force, but they are not uniform.

Denmark.—Teachers, both men and women, if definitely appointed, are entitled to pensions after ten years' service, beginning with the thirtieth year of life. The annuity amounts to two-thirds of the average salary received during the last five years. Secondary school teachers may be pensioned after two years' service, the pension at that time amounting to one-tenth of the salary. Teachers 70 years old get two-thirds of their last year's salary.

Norway.—The Storthing (parliament) decides each pension claim separately; a uniform system does not exist. This applies to elementary as well as to secondary teachers.

Sweden.—Pensions are paid to elementary teachers after ten years' service. The full pension amounts to three-fourths of the last year's salary, but must not exceed $268, which amount is reached after 30 years of service at the age of 55. If a teacher be incapacitated before he reaches that age, his pension is 1 per cent less for every year wanting of thirty years' service. For secondary teachers different regulations are in force: A teacher 70 years old, having served at least thirty years, or one 65 years old, having served forty years,

or if incapacitated before that time, is entitled to a pension of from $804 to $955. In cases of disability teachers receive full salary, but are obliged to pay substitutes until they reach the age of 65.

Netherlands.—Pension legislation dates back to 1855. Pensions may be paid after ten years of service, and the age limit is 65. The pension amounts to one-sixtieth of the salary for every year of service, the maximum being two-thirds of the salary. A law, dated 1905, extends the benefits of the pension law to private school-teachers, but they are obliged to contribute to the fund 2 per cent of their salaries. The law of 1905 also provides for widows and orphans of teachers. The provisions for secondary teachers are the same as for elementary teachers, only the maximum annuity must not exceed $1,200.

Belgium.—Entitled to pensions are teachers who are incapacitated after twelve years of service; the maximum age is 60 years, and thirty years of service. City teachers maintain separate pension funds, to which they make contributions amounting to 3 per cent of their salaries, and extra contributions of from one to three-twelfths of each salary increase. These funds are subsidized by State and provincial governments. For secondary teachers different regulations are in force. The pension is calculated upon an average of the salaries received during five years; one-fiftieth of that average is equal to the annual increase of the pension. But no pension is granted amounting to more than two-thirds of the average salary for the last five years, and must in no case exceed $1,000.

France.—According to a law of 1876 elementary teachers are entitled to pensions if 55 years old and having served twenty-five years, unless incapacitated through service before that time. Years passed in a normal school, after having been certificated, are counted as actual service, but service in private institutions is never considered in calculating the pension. After twenty-five years of service the pension amounts to one-half of the average salary of the last six years; this amount is increased by 2 per cent of the salary for every additional year of service. In no case, however, may the pension exceed three-fourths of the average salary for the last six years. On the other hand, in no case may a pension for a man fall below $120, or for a woman below $100. This latter provision does not apply to pensions paid to teachers incapacitated before the maximum limit of service is reached. In French lyceums a pension of two-thirds of the average salary for the last five years is paid to teachers after thirty years of service, or at the age of 60. At the first payment of any salary, and on the occasion of every salary increase, one-twelfth is deducted to support the pension fund. Beside these deductions there are others made from the salary amounting to 10 per cent throughout the thirty years of service.

Italy.—By a law of 1878 a pension fund for teachers in public primary schools was established which offers annuities to teachers 55 years old. Teachers who are incapacitated before reaching that age are dependent upon mutual aid societies, of which there are a few in the large cities. Secondary teachers may, for reasons of impaired health, be excused from serving for several years, if need be, on one-half to three-fourths of their salaries. This is the only pension provision made for secondary teachers.

England.—Entitled to pensions are: (1) Elementary teachers who have completed their sixty-fifth year of life; (2) teachers who are incapacitated before that time without fault of their own, provided they have served at least ten years, one-half of their entire length of service having been in the service of the State—that is, in State-supported schools. There are certain local pension funds established by the Government, into which a man teacher pays annually $14.28, a woman $9.52. The amount of the pension is calculated according to the sum of the contributions the pensioner made during the time he was engaged in teaching in State-supported schools. The maximum pension for men is $569.60, for women $364.56. The State pays also, independent of the aforementioned pensions, to teachers who give up teaching at 65 years of age, and have been engaged in State-supported schools half of all their service, $2.38 for every year of service. Invalid pensions amount to $95.20 for the first ten years of service and $4.76 for every additional year. The invalid pension for women amounts to $71.40 for the first ten years and $3.17 for every additional year of service. Secondary schools in England are mostly either private or corporation schools, hence it is impossible to quote any general pension rule applicable to such schools.

Spain.—This country pays no pensions to elementary teachers. Secondary teachers are said to receive two-fifths of their salary after twenty years, three-fifths after twenty-five years, and four-fifths after thirty-five years of service.

Portugal.—This country pays no pensions to elementary teachers. Secondary teachers receive in cases of impaired health one-third of their salaries after ten years, two-thirds after twenty years. If a teacher has taught twenty-five years, he may, on motion of the authorities, be pensioned at full salary. If he continues to serve, his salary is increased one-third; but after another period of ten years, his retirement is compulsory, and his pension is equal to the highest rate of salary.

Greece.—The report of this country says nothing of pensions for elementary teachers. Secondary teachers receive two-fifths of their salaries after nineteen years and six months of service; after

that the pension increases one-fiftieth every year. For the benefit of the pension fund 7½ per cent of every monthly payment of salary is deducted.

Russia.—Nothing is said about pensions for elementary teachers. The secondary teachers are entitled to pensions after twenty-five years of service, namely $400 to principals, $350 to inspectors, $300 to class teachers, $275 to language teachers. In the large cities, the pension of a principal is $600, of an inspector $450, of a teacher $375. A teacher remaining in service after twenty-five years receives both pension and salary, and, moreover, his pension increases one-fifth every five years.

HIGHER COMMERCIAL EDUCATION IN EUROPE.

In the United States and in Great Britain higher commercial education is preferably sought in the old-established universities, as well as in State institutions, and business men gain their higher education in close connection with that of professional men. In continental Europe, on the other hand, a tendency prevails to specialize the business man's higher education, and to keep the higher commercial institutions separate from the old academic seats of learning. This tendency has been clearly set forth by Professor Jastrow (see Annual Report of 1905, Chapter VI) in his memorial to the Berlin Chamber of Commerce, in which he fully explained that tendency with reference to both its causes and its effects. But it is also demonstrated by the establishment of separate higher institutions for business men in Frankfort, Cologne, Berlin, Vienna, Zurich, Paris, Lyon, Antwerp, and other centers of industry and commerce, and also by the fact that the higher institutions for business men which were made departments of the old universities and polytechnic institutes, as, for instance, Leipzig and Aix la Chapelle (Aachen), fall far behind independent institutions in their attendance. While the independent commercial university of Cologne had, in 1906, 1,724 students, the commercial department of the polytechnicum at Aix la Chapelle had only 29. The Berlin independent commercial university, though opened as late as in the fall of 1906, has over a thousand students, while the Leipzig university department of commerce, the oldest German higher commercial seat of learning, has only 633.

This demonstrates the desire of business men to keep aloof from universities for professional men and learned scholars. But it is not so much the desire to erect a barrier between them and business men as it is the desire to specialize in all branches of learning, in order to accomplish most in the various fields of human effort, which makes the business men of central Europe support inde-

pendent institutions. The same tendency toward specialization is shown by the enormous attendance at polytechnica and agricultural, forestry, and other special institutions, schools which in England and America are preferably connected with universities.

The Annual Report of 1905 contained on page 216 a statement of the higher commercial schools of Europe. This year two more foundations of higher commercial institutions in Germany can be recorded, Mannheim and Solingen. Both of these, like the one in Hamburg, are still in embryo; that is to say, they are not fully developed universities but still go under the significant name of "Higher commercial courses" (Handels-Hochschulkurse). Mannheim in the grand duchy of Baden, a center of trade along the upper Rhine, maintained in 1907 courses which were attended by 539 matriculated students, and to these must be added 672 "Hörer," or attendants of evening lectures, making a total of 1,211 participants. These courses, which will be consolidated in 1908 in a building entirely devoted to this purpose, were given by 24 professors, 6 of whom came over from the old-renowned university of Heidelberg.

Solingen, a city in the Prussian Rhenish province, and the center of the German cutlery industry, also began with commercial lecture courses, as Cologne and Mannheim did, and these courses are intended to develop into a separate institution for merchants and manufacturers. Cologne opened during the summer of 1907 a splendid building devoted exclusively to higher commercial education, which has now nearly 2,000 students.

On the other hand, the business men of Hamburg, including the officials of the great steamship companies and the heads of exporting firms, who are in frequent contact with English and American men of business, seem to incline toward the idea of not separating the higher education of merchants from that of men of other professions and of technologists. The higher courses in that city, which have been open to the graduates of its secondary schools for several years, have not been as yet consolidated into one institution, at first intended to be a commercial university. The discussions in the press and in both branches of the city government indicate the prevailing conviction that the English and American way is better. From this, and from other circumstances, it is seen that there are not wanting those who think that in higher educational affairs excessive specialization is not the highest aim, but that all special higher institutions of learning should base their work on general cultural studies. Professor Jastrow's article, mentioned before, offers the various arguments for and against separate commercial institutions, and aids in understanding the conditions in Germany.

The following extract from an article in an English journal, sent by United States Consul Marshall Halstead, Birmingham, England,

shows the efforts made in Great Britain in behalf of higher commercial education:

An experiment which will be watched with interest and probably imitated elsewhere has recently been commenced at the Victoria University of Manchester. The prospectus of the faculty of commerce and administration enables one to judge of the true significance of the innovation which some of the younger universities are introducing. The aim of this development is to give a systematic training in what may be called higher commercial subjects, in the study of methods of government and administration, and in economic and social investigation. The student who aspires to the degree of bachelor of commerce must have attended classes in political economy, the organization of commerce and industry, modern history, geography, commercial law accounting, and two modern languages, as well as one or two special subjects. For the degree of master of commerce will be eligible bachelors of commerce of not less than three years' standing who have carried on more advanced studies, and who have presented a dissertation or thesis which has been accepted by the faculty.

In framing the curriculum the end in view has been to insure a wide training calculated to fit the student for any kind of business or commerce, and also to give instruction in subjects akin to what is to be his work in life. Some of those who attend the classes will give their whole time after leaving school to the "business sciences," but it is intended to make provision for those who can spare their evenings only for such studies. Twenty or even ten years ago ridicule would have been poured copiously on such a project as that which we describe. Certain obvious objections or difficulties would have been stated as if they were conclusive, and the promoters of such a scheme would have been told that the old, well-tried curricula furnished the best training for persons about to enter business or the professions. Failure would have been predicted; it would have been said that such a course of study would turn out a kind of sciolist useful in no walk of life. To-day there will be few criticisms or predictions of this kind. We watch the result with interest and sympathy. Even those who have misgivings about the practicability of making such a course of instruction a thorough mental discipline will be glad to see the experiment tried on the scale which the Victoria University contemplates.

Every university, and more especially those of modern growth, in commercial towns, must face the fact that if a liberal education is to be generally diffused it must be given in new ways; otherwise a large class will be shut out from it. In the view of some of our best minds the most effectual means of awakening and invigorating the higher faculties would be to pass every youth of intelligence through a curriculum somewhat similar to that which the older universities have evolved. But the circumstances of multitudes render such a training impossible. They must go into business at an early age. A liberal education must have relation to that if it is to be theirs. They can not wait to be, in Burke's phrase, "reasonably tinctured with literature;" they must concentrate their intellectual activity chiefly on the subject-matter of their future labors. It may well be that a study of pure mathematics, or of Greek, or of a branch of natural science, would give a finer edge to the faculties and a larger horizon. But the youth who is to enter commerce, like his friend destined for medicine, may have to deny himself many accomplishments and excursions into tempting fields of knowledge. There is here no question of the merits of classical training.

The Victoria University accepts the facts as they are in great towns. For many it is such a training as is offered or none. In fairness to the authors of the scheme, it should be added that it is not intended to cram the student with indigestible useless information, but to discipline and educate. The training is not put forward as "a substitute for experience," but "it should broaden the outlook, train the faculties to analyze new commercial and economic situations, and impart organized knowledge."

What has been done at Cambridge by the new curriculum in economics, and, in a less marked manner, at Oxford, together with the success of the London School of Economics, is a proof of the desire for better instruction than has hitherto been available as to the production and distribution of wealth. Something less bookish and more realistic, less polemical, and with fewer indecisive battles over words, less remote from the world of affairs, a bridge between the higher abstractions of science and the actualities of the man of business, is desired by a class which has neither time nor inclination for the study of what once passed muster as economic science. It is a notable feature of the scheme that on the staff of the faculty of commerce men engaged in business are associated with professional teachers; that, for example, banking will be taught by those practically conversant with the business of a modern bank. We could illustrate the advantage of this sort of instruction by no better instance than accounting or bookkeeping.

Probably there is no subject, not even political economy, as to which a general knowledge based on the study of principles and experience is more to be desired. The want of such knowledge is responsible for so much mischief. A great company comes to grief; its directors have been jockeyed by a clever, ambitious, or unscrupulous manager; there is revealed in the courts a strange mixture of fraud and folly. In the ultimate analysis the cause is often the ignorance of his dupes of the elements of bookkeeping, their inability to apply business tests to his florid statements, or to grasp the full effect of the worked-up accounts put before them. A business that once flourished languishes in new hands; the new owner is puzzled and irritated at the changes in its fortunes; he does not put, as with a knowledge of accounts he might quickly put, his finger on the weak point. In days when Victoria University teaches bookkeeping and Birmingham University promises to have a coal mine on the premises for purposes of tuition, "academic" instruction has a new meaning.

Of less obvious value are some of the subjects included in the curriculum. But one and all of them have the merit of making the man of business sit more loosely to the ways and circumstances which he inherits, and be more receptive of changes which the action of his neighbors and competitors renders imperative. We note that among the languages in which instruction is offered are Chinese, including writing and pronunciation, and Arabic, including spoken dialects. This is a timely recognition of the fact that for many these tongues may soon have as great commercial value as French or German. Whether the bachelors of commerce will make money faster than their rivals is far from certain. Nothing that the university can do for its sons can atone for want of mother wit, perseverance, and force of character. It is quite possible, however, that the training outlined in the prospectus will enable men of business to take a larger view of their affairs. Mixing business with brains—and the aim of the new faculty is that—can not but be good.

CHILDREN AND WOMEN FACTORY LABORERS IN GERMANY IN 1906.[a]

1. *Number in each industrial group.*

Designation of industrial groups.	Number of factories employing—		Number of juvenile laborers employed.							Number of women over 16 employed.		
	Juvenile laborers.	Women laborers over 16 years of age.	Children under 14 years.		Children from 14 to 16 years.		Totals.			16 to 21 years old.	Over 21 years old.	Total.
			Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Total.			
Mining, smelting, saline works, and peat digging	1,709	764	124	13	33,258	1,214	33,382	1,227	34,609	7,425	8,783	16,208
Stone and clay industries	8,084	5,946	1,016	347	30,397	7,863	31,413	8,210	39,623	24,455	40,819	65,274
Metal industries	9,806	3,434	943	321	42,789	9,446	43,732	9,767	53,499	24,253	36,962	61,215
Machines, tools, instruments, and apparatuses	8,387	1,563	918	83	51,220	3,046	52,138	3,129	55,267	15,476	22,052	37,528
Chemical industries	750	943	56	83	3,765	2,235	3,821	2,318	6,139	7,084	11,747	18,831
Forest auxiliary products, illuminating materials, fats, oils, and varnish	537	761	57	21	1,151	1,044	1,208	1,065	2,273	2,999	4,325	7,324
Textile industry	8,226	11,445	1,183	1,845	29,190	47,866	30,373	49,711	80,084	136,230	261,091	397,321
Paper industry	2,123	2,698	186	234	6,670	8,604	6,856	8,838	15,694	22,067	30,981	53,048
Leather industry	876	863	86	50	3,665	1,998	3,751	2,048	5,799	5,482	8,758	14,240
Industry of wood and other carving materials	8,695	2,671	592	196	19,953	3,547	20,545	3,743	24,288	9,203	17,442	26,645
Food and delicacies	10,866	10,257	345	535	18,729	17,804	19,074	18,339	37,413	50,245	97,496	147,741
Clothing and cleaning	16,180	35,285	296	800	6,957	35,993	7,253	36,793	44,046	105,151 [b] 879	105,377	211,407
Building trades, including lumber yards	2,731	162	64	.....	7,484	14	7,548	14	7,562	119	511	630
Polygraphic industries	4,838	3,595	351	89	12,496	4,484	12,847	4,573	17,420	15,406	20,798	36,204
Other branches of industry	153	133	11	2	605	167	616	169	785	605	1,678	2,283
Total in 1906	83,961	80,520	6,228	4,619	268,329	145,325	274,557	149,944	424,501	426,200 [b] 879	668,820	1,095,899
Total in 1905	79,735	75,921	5,771	4,474	246,591	135,673	252,362	140,147	392,509	406,829 [b] 879	633,918	1,041,626

[a] This and the following table are taken from "Vierteljahrshefte zur Statistik des Deutschen Reichs," No. 4, 1907.
[b] The Duchy of Brunswick gives under group "Clothing and Cleaning" only the sum total of women over 16 employed.

II. *Percentage classification.*

Designation of industrial groups.	Per cent of children and women in the various groups of industry.				In the various industrial groups there were of every 100—								In each factory there was an average of—	
	Children under 14 years old.	Children 14–16 years old.	Women.		Children under 14 years.		Children between 14 and 16 years.		Juvenile laborers.		Women.		Juvenile laborers.	Adult women.
			16 to 21 years old.	Over 21 years old.	Boys.	Girls.	Boys.	Girls.	Children under 14.	Children 14–16.	16 to 21 years.	Over 21 years.		
Mining, smelting, saline works, and peat digging	1.3	8.3	1.7	1.3	90.5	9.5	96.5	3.5	0.4	99.6	45.8	54.2	20.3	21.2
Stone and clay industries	12.6	9.3	5.7	6.1	74.5	25.5	79.4	20.6	3.4	96.6	37.5	62.5	4.9	11.0
Metal industries	11.7	12.6	5.7	5.5	74.6	25.4	81.9	18.1	2.4	97.6	39.6	60.4	5.5	17.8
Machines, tools, instruments, and apparatuses	9.2	13.1	3.6	3.3	91.7	8.3	94.4	5.6	1.8	98.2	41.2	58.8	6.6	24.0
Chemical industries	1.3	1.5	1.7	1.8	40.3	59.7	62.8	37.2	2.3	97.7	37.6	62.4	8.2	20.0
Forest auxiliary products, illuminating materials, fats, oils, varnish	0.7	0.5	0.7	0.6	73.1	26.9	52.4	47.6	3.4	96.6	40.9	59.1	4.2	9.6
Textile industry	27.9	18.6	32.0	39.0	39.1	60.9	37.9	62.1	3.8	96.2	34.3	65.7	9.7	34.7
Paper industry	3.9	3.7	5.2	4.6	44.3	55.7	43.7	56.3	2.7	97.3	41.6	58.4	7.4	19.7
Leather industry	1.2	1.4	1.3	1.3	63.2	36.8	64.7	35.3	2.3	97.7	38.5	61.5	6.7	16.5
Industry of wood and other carving materials	7.3	5.7	2.2	2.6	75.1	24.9	84.9	15.1	3.2	96.8	34.5	65.5	2.8	10.0
Food and delicacies	8.1	8.8	11.8	14.6	39.2	60.8	51.3	48.7	2.4	97.6	34.0	66.0	3.4	14.4
Clothing and cleaning	10.1	10.4	[a] 24.7	[a] 15.8	27.0	73.0	16.2	83.8	2.5	97.5	[a] 49.9	[a] 50.1	2.7	6.0
Building trades, including lumber yards	0.6	1.8	0.02	0.1	100.0	.....	99.8	0.2	0.8	99.2	18.9	81.1	2.8	3.9
Polygraphic industries	4.0	4.1	3.6	3.1	79.8	20.2	73.6	26.4	2.5	97.5	42.6	57.4	3.6	10.1
Other branches of industry	0.1	0.2	0.1	0.3	84.6	15.4	78.4	21.6	1.7	98.3	26.5	73.5	5.1	17.2
Total in 1906	100.0	100.0	[a] 100.0	[a] 100.0	57.4	42.6	64.9	35.1	2.6	97.4	[a] 38.9	[a] 61.1	5.1	13.6
Total in 1905	100.0	100.0	[a] 100.0	[a] 100.0	56.3	43.7	64.5	35.5	2.6	97.4	[a] 39.1	[a] 60.9	4.9	13.7

[a] The Duchy of Brunswick does not state age of adult women, hence 879 of them are not included in this.

THE IMPERIAL RESCRIPT ON EDUCATION IN JAPAN.

[The Bureau of Education has received the following document from the Department of Education at Tokyo, through the Smithsonian Institution.]

At the early dawn of our new era, His Majesty the Emperor was pleased to proclaim the need [of] seeking knowledge in all quarters of the globe. In obedience to this proclamation the Government took necessary measures to improve social and political systems and institutions after the most enlightened models, and the work of education received the greatest share of attention. In the fifth year of Meiji (1872), a comprehensive law relating to the system of education was issued, which had chiefly in view the introduction and cultivation of modern sciences. The educational institutions of the European nations had been carefully investigated and the curricula of our elementary, middle, and normal schools were formed so as to benefit by the valuable additions of those studies which had helped these nations to build up their civilization. Our education has had no connection with religion since olden times, and the new system is also entirely free from any sacerdotal influence. Secular morality has always been taught in the schools and forms the distinctive feature of our system.

As a result of foreign intercourse a phenomenal progress of new theories, ideas, manners, and customs ensued. The radical advocates of the new régime were for giving up everything native and for blindly following all things foreign, while their opponents obstinately clung to the old systems and turned a deaf ear to all suggestion of improvements. As regards the moral system of the nation, some would have it based on the principles of pure ethics, while others insisted on having Confucianism, Buddhism, or Christianity for its standard. Conflicting doctrines and wild views filled the atmosphere, and the people were at a loss which to follow. In such circumstances the morality taught in the schools had no fixed basis. The Educational Department at one time attempted to base it on the wise sayings and deeds of the ancients, but soon found them inadequate. Thoughtful men regretted this state of things and tried in vain to find a remedy. It was in this state of uncertainty that the following historical event took place at the Court.

On the thirtieth of October, in the twenty-third year of Meiji (1890), His Majesty the Emperor summoned Count (now Marquis) Artomo Yamagata, the then Prime Minister, and Mr. (now Viscount) Akimasa Yoshikawa, the then Minister of Education, and graciously delivered to them the Rescript on Education. The next day the Minister of Education caused a copy of it to be sent to every school in the Empire, with instructions to those who were engaged in the work of education to bear constantly in mind the spirit of this Rescript in the discharge of their responsible duties. On ceremonial and other suitable occasions they were instructed to read and expound it before the assembled pupils.

Thus the people at last received a guidance which became a light for them to follow amid the chaos of theories and opinions, and all the schools in the empire found in it a uniform basis of moral teaching.

Although several English versions of the Rescript exist, they have been found deficient for conveying the exact sense of the original, of which a complete literal version into any other language is indeed a matter of great difficulty. Towards the end of last year, the Educational Department, seeing the possibility of improving the translation, convoked a number of scholars to discuss the matter. The accompanying version is the result. The scholars thus assembled considered their work by no means perfect, as the difficulty of rendering into a foreign language all the shades of meaning found in the text is almost insurmountable; yet we feel confident that it is a great improvement on all previous versions. We now distribute copies for the benefit of those foreigners who may wish to know the principle of our moral education.

The DEPARTMENT OF EDUCATION, JAPAN,
June, 40th year of Meiji (1907).

[TRANSLATION OF THE RESCRIPT.]

Know ye, Our subjects:

Our Imperial Ancestors have founded Our Empire on a basis broad and everlasting and have deeply and firmly implanted virtue; Our subjects ever united in loyalty and filial piety have from generation to generation illustrated the beauty thereof. This is the glory of the fundamental character of Our Empire, and herein also lies the source of Our education. Ye, Our subjects, be filial to your parents, affectionate to your brothers and sisters; as husbands and wives be harmonious, as friends true; bear yourselves in modesty and moderation; extend your benevolence to all; pursue learning and cultivate arts, and thereby develop intellectual faculties and perfect moral powers; furthermore advance public good and promote common interests; always respect the Constitution and observe the laws; should emergency arise, offer yourselves courageously to the State; and thus guard and maintain the prosperity of Our Imperial Throne coeval with heaven and earth. So shall ye not only be Our good and faithful subjects, but render illustrious the best traditions of your forefathers.

The Way here set forth is indeed the teaching bequeathed by Our Imperial Ancestors, to be observed alike by Their Descendants and the subjects, infallible for all ages and true in all places. It is Our wish to lay it to heart in all reverence, in common with you, Our subjects, that we may all thus attain to the same virtue.

The 30th day of the 10th month of the 23rd year of Meiji.

[Imperial Sign Manual. Imperial Seal.]

EXTENSION OF THE COMPULSORY SCHOOL PERIOD IN JAPAN.

[Report to the Secretary of State by Hon. Luke E. Wright, American ambassador at Tokyo, April 11, 1907.]

I have the honor to inclose to you herewith a translation of the principal parts of a ministerial notice, which was published in the Official Gazette of March 21 last, amending the primary school ordinance (Imperial Ordinance No. 344, of August, 1900). These amendments are of considerable importance to the education of the Japanese people and to their wage-earning capacity.

According to the regulations of 1900, four years' attendance at the elementary schools was obligatory, while two years' additional attendance at the high elementary schools was voluntary. These high elementary schools provided for four years of study. Even at that time, however, this system was looked upon as insufficient and temporary, but it has not been found possible to increase the requirements until now. The new ordinance provides that the courses of the first two years of the high elementary schools shall be transferred to the elementary schools and made compulsory, thus providing for six years' compulsory education in the elementary schools. It is intended evidently to add a further two years to the high elementary schools, thus making them as before provide for four years' instruction. Even at present these latter schools may, if they desire it, provide for three years' instruction. Among the courses thus transferred from the high elementary schools to the elementary schools and made compulsory are manual-training courses, which have proved to be of great value. As this change will involve increased expenses to provide additional teachers, buildings, etc., the law provides that in certain cases where necessary a postponement of the application of the new ordinance may be granted.

Another important change introduced by this ministerial notice is the abolition of private elementary schools, which are said to have proved inefficient and to have already greatly diminished in number. So far as the embassy knows, this change will not affect any American schools, there being no elementary schools among them.

PRINCIPAL POINTS IN THE AMENDMENTS TO THE PRIMARY SCHOOL ORDINANCE.

Article 13. Struck out in toto. It reads as follows:

A prefectural governor may, under special circumstances, postpone the establishment, in part or in whole, of municipal primary schools of common grade, and substitute for the same those private primary schools existing in the cities concerned.

The chief official of a county may, under special circumstances, postpone the establishment, in part or in whole, of town or village primary schools of common grade, or the intrusting of children's education to other school districts. He may then substitute for the same those private primary schools existing in the towns or villages concerned or their school districts.

The curriculum of substitute primary schools shall be determined by the minister of education.

Article 18. Amended as follows:

The period of education in the primary schools of common grade shall be six years.

The period of education in the primary schools of higher grade shall be two years, but it may be extended to three years.

Article 36. The phrase in paragraph 1, "or to private primary schools substituted for the same," struck out. The original reads as follows:

The protectors of children of school age shall send the children to be put in school to city, town, or village primary schools of common grade. But the protectors may, upon permission of the chief officials of a city, town, or village, cause their children to pursue the curriculum of the primary school of common grade at home or elsewhere.

SUPPLEMENTARY CLAUSES.

This ordinance shall take effect on April 1, 1908, but the amendments to article 13 and paragraph 1 of article 36 shall take effect on the 1st of April, 1907.

The private primary schools substituted for city, town, or village primary schools of common grade may continue in the latter capacity until the terms of their respective charters expire.

In case the provision of paragraph 1 of article 18 should be found difficult to observe owing to special circumstances, the cities, towns, or villages, or the respective school districts in the case of city, town, or village primary schools of common grade, and the founders in the case of primary private schools, shall apply to the prefectural governors for postponement, stating the period desired. For the time being, in such case, the former provisions may continue to be applied to the primary schools of common grade, and in the same event to the primary schools of higher grade as well.

TRANSLATOR'S NOTE.

According to article 32, paragraph 4 of the primary school ordinance, "the protectors of children of school age" means "Those who exercise parental rights with respect to children of school age, or their legal guardians in case there are no persons exercising parental rights."

ELEMENTARY EDUCATION IN FOREIGN COUNTRIES.

Elementary school pupils, teachers, and expenditures in various foreign countries—Chief officers of education.

Country.	Date of report.	Enrollment in elementary schools.			Percentage of total population.	Teachers.			Expenditures.			Population.	Date of census.	Chief officer of education.
		Boys.	Girls.	Total		Men.	Women.	Total.	Total.	Per capita of enrollment.	Per capita of population.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
EUROPE.														
Austria-Hungary	1904	3,639,993	3,563,991	7,203,984	15.2	86,960	36,868	123,828	.....	.....	.....	47,345,931	1904	No imperial or federal office.
Austria	1904	1,959,014	1,919,815	3,878,829	14.4	62,429	29,379	91,808	$20,309,101	$5.03	$0.75	27,238,053	1904	Dr. G. Marchet, minister of worship and instruction.
Hungary (including Croatia and Slavonia)	1904	1,680,979	1,644,176	3,325,155	16.5	24,531	7,489	32,020	[a] 2,604,000	.80	.13	20,107,878	1904	Count A. Apponyi von Nagyappony, minister of worship and instruction.
Belgium	1905	441,115	428,696	869,811	12.14	8,565	10,231	18,796	[b] 9,229,589	10.06	1.28	[c] 7,160,547	1900	M. Schollaert, minister of interior and instruction.
Bulgaria	1904–5	198,811	102,565	301,376	7.5	.....	.....	6,555	.....	.....	.....	4,028,239	[d] 1905	N. Apostolow, minister of public instruction.
Denmark	1905	.....	.....	330,256	12.7	.....	.....	.....	.....	.....	.....	2,605,268	1906	Enevold Sörensen, minister of ecclesiastical affairs and public instruction.
France	1905–6	2,802,599	2,765,431	5,568,030	14.18	66,334	84,533	150,867	.....	.....	.....	39,252,267	1906	M. A. Briand, minister of public instruction.
German Empire	1903	.....	.....	9,256,751	15.3	122,145	22,339	144,484	99,743,876	11.42	1.64	60,605,183	1905	No imperial or federal office.
Prussia (kingdom)	1903	.....	.....	5,670,870	15.2	76,342	13,866	90,208	64,240,246	11.35	1.72	37,293,324	1905	Doctor Holle, minister of ecclesiastical, educational, and medical affairs.
Bavaria (kingdom)	1903	.....	.....	873,399	13.4	12,184	2,715	14,899	9,464,308	10.83	1.45	6,524,372	1905	Dr. K. von Bumm, minister of worship and instruction.
Saxony (kingdom)	1901	.....	.....	688,057	15.2	10,003	401	10,404	8,168,874	11.87	1.81	4,508,601	1905	Mr. K. von Schlieben, minister of worship and instruction.
Wurttemberg (kingdom).	1904	.....	.....	295,325	13.0	4,615	494	5,109	2,919,070	9.90	1.27	2,302,179	1905	Mr. von Fleischhauer, minister of worship and instruction.
Baden (grand duchy.)	1903	.....	.....	273,149	13.5	3,631	418	4,049	2,618,000	9,84	1.30	2,010,728	1905	Baron A. von Dusch, minister of justice, worship, and instruction.

[a] From State only. [b] For 1904. Includes infant schools and continuation schools for adults. [c] Estimated. [d] December 31.

Elementary school pupils, teachers, and expenditures in various foreign countries—Chief officers of education—Continued.

Country.	Date of report.	Enrollment in elementary schools.			Percentage of total population.	Teachers			Expenditures.			Population.	Date of census.	Chief officer of education.
		Boys.	Girls.	Total.		Men.	Women.	Total.	Total.	Per capita of enrollment.	Per capita of population.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
EUROPE—continued.														
German Empire—Con.														
Hesse (grand duchy).	1904	.....	.....	165,707	13.9	2,525	222	2,747	$1,874,250	$11.31	$1.55	1,209,175	1905	Dr. H. Eisenhuth, president department of education.
Mecklenberg-Schwerin (grand duchy).	1905	.....	.....	94,755	15.2	1,912	145	2,057	910,826	9.06	1.46	625,045	1905	Doctor Langfeld, minister of justice, worship, and instruction.
Saxe-Weimar (grand duchy).	1904	.....	.....	59,528	15.4	979	15	994	610,946	10.25	1.57	388,095	1905	Dr. C. Rothe, chief of department of worship and instruction.
Mecklenberg-Strelitz (grand duchy).	1905	.....	.....	16,057	15.5	348	34	382	127,568	8.00	1.23	103,451	1905	Doctor Piper, president of consistory.
Oldenburg (grand duchy).	1904	.....	.....	66,721	15.2	1,101	120	1,221	698,530	10.47	1.59	438,856	1905	Mr. F. P. Ruhstrat, chief department of justice, worship, and instruction.
Brunswick (duchy).	1905	.....	.....	81,396	16.7	1,142	151	1,293	861,898	10.59	1.77	485,958	1905	Dr. A. Trieps, president commission of worship and instruction.
Saxe-Meiningen (duchy)).	1904	.....	.....	44,011	16.0	656	54	710	467,191	10.61	1.73	268,916	1905	Mr. Fr. Trinks. chief department of justice, worship, and instruction.
Saxe-Altenberg (duchy).	1904	.....	.....	34,448	16.7	495	23	518	333,774	9.68	1.62	206,508	1905	Mr. Besser, director-general of schools.
Saxe-Coburg-Gotha (duchy).	1905	.....	.....	39,442	16.3	625	79	704	420,070	10.61	1.73	242,432	1905	Doctor Bachof, director-general of schools.
Anhalt (duchy)	1905	.....	.....	52,684	16.0	814	154	968	564,298	10.73	1.72	328,029	1905	Mr. Rümelin, president department of instruction.
Schwarzburg-Sondershausen (principality).	1904	.....	.....	13,918	16.2	211	7	218	137,802	9.90	1.62	85,152	1905	Mr. H. Peterson, chief department of worship and instruction.
Schwarzburg-Rudolstadt (principality).	1904	.....	.....	16,222	16.9	263	2	265	126,616	8.00	1.31	96,835	1905	Mr. C. von Holleben, chief department of worship and instruction.
Waldeck (principality).	1904	.....	.....	10,294	17.3	166	6	172	85,442	8.30	1.45	59,127	1905	Baron von Hadeln, president of consistory.

Reuss, senior line (principality).	1904	.....	.....	13,206	18.8	162	19	181	93,296	7.06	1.32	70,603	1905	Mr. Hermannsgrän, inspector-general of schools.
Reuss, junior line (principality).	1904	.....	.....	21,702	15.1	317	20	337	194,684	9.00	1.35	144,584	1905	Mr. Gräsel, president department of worship and instruction.
Schaumburg-Lippe (principality).	1904	.....	.....	7,648	17.0	72	5	77	50,694	6.65	1.15	44,992	1905	Mr. Römers, president of consistory.
Lippe (principality)	1903	.....	.....	23,895	16.5	261	.....	261	144,704	6.05	.99	145,557	1905	Mr. Pustkuchen, president of consistory.
Lübeck (free city)	1906	.....	.....	12,109	11.5	187	158	345	199,482	16.47	1.90	105,857	1905	Senator E. C. J. Schön, president commission of schools.
Bremen (free city)	1904	.....	.....	27,830	10.6	498	97	595	510,986	18.36	1.95	263,440	1905	Senator D. Ehmck, president commission of worship and instruction.
Hamburg (free city)	1905	.....	.....	98,610	11.3	1,653	950	2,603	1,742,398	17.67	2.00	874,878	1905	Senator W. von Melle, president commission of worship and instruction.
Alsace-Lorraine (imperial domain)	1904	.....	.....	226,102	12.5	2,895	2,329	5,224	2,110,822	9.34	1.16	1,814,564	1905	Doctor Albrecht, director-general of instruction.
Great Britain and Ireland:														
England and Wales.	1905–6	.....	.....	6,031,606	17.66	.....	.....	174,079	79,898,288	13.24	2.33	[a]34,152,977	1905	Right Hon. Reginald McKenna, president of the board of education.
Scotland	1906	.....	.....	806,737	17.07	5,726	15,828	21,554	10,956,792	13.58	2.31	[a] 4,723,539	1906	Right Hon. John Sinclair, vice-president of the committee of council on education in Scotland.
Ireland	1906	.....	.....	739,009	16.84	5,780	8,559	14,339	6,801,239	9.20	1.54	[a] 4,388,107	1905	Commissioners of national education in Ireland.
Greece	1902	153,000	47,570	210,570	8.7	3,546	800	4,346	.....	.....	.....	2,433,806	1896	M. Stephanopoulos, minister of ecclesiastical affairs and instruction.
Italy	1901–2	1,434,844	1,298,505	2,733,349	8.1	21,178	44,561	65,739	13,209,080	4.83	.39	[a]33,733,198	1906	Luigi Rava, minister of public instruction.
Malta	1905–6	.....	.....	18,197	9.0	.....	.....	716	123,909	6.80	.61	202,134	1905	Mr. E. Magro, director of public instruction.
Netherlands	1904–5	.....	.....	[b]845,096	15.1	.....	.....	26,692	8,562,311	10.13	1.53	5,591,701	1905	Dr. P. Rink, minister of the interior.
Norway	1904	.....	.....	354,336	15.8	4,832	2,858	7,690	2,738,554	7.73	1.22	2,240,032	1900	A. Berge, minister of ecclesiastical affairs and public instruction.
Portugal	1902	.....	.....	240,000	4.4	.....	.....	.....	.....	.....	.....	5,423,132	1900	J. F. C. Franco, premier and minister of the interior.
Roumania	1903–4	.....	.....	474,431	8.0	.....	.....	6,066	.....	.....	.....	5,956,690	1899	Sp. Haret, minister of public instruction and ecclesiastical affairs.
Russia	1903	3,793,008	1,551,739	5,344,747	4.2	.....	.....	209,394	4,031,137	.75	.03	126,601,433	1897	Privy Councillor Count von Kaufmann, minister of public instruction.
Finland	1906	67,330	59,975	[c]192,832 127,305	12.3	1,673	2,035	3,708	.....	.....	.....	2,592,864	1897	
Servia	1904	95,265	27,013	122,278	4.5	.....	.....	2,219	753,174	6.16	.28	2,688,747	1905	A. Nikolitch, minister of public instruction and ecclesiastical affairs.
Spain	1901	.....	.....	1,617,314	.....	.....	.....	.....	8,322,595	5.15	.45	.....	1901	F. Rodriguez San Pedro, minister of public instruction and fine arts.
Sweden	1904	.....	.....	727,008	13.7	.....	.....	18,274	7,070,838	9.73	1.34	5,294,885	1905	A. H. Hammerskjöld, minister of ecclesiastical affairs and education.
Switzerland	1905	364,040	310,702	[d] 674,742	18.6	8,535	5,479	14,014	11,939,400	17.69	3.28	3,641,900	1906	No federal office.

[a] Estimated.
[b] Includes public subsidized and non-subsidized schools.
[c] In ambulatory schools.
[d] Includes special schools of elementary character.

Elementary school pupils, teachers, and expenditures in various foreign countries—Chief officers of education—Continued.

Country.	Date of report.	Enrollment in elementary schools.			Percentage of total population.	Teachers.			Expenditures.			Population.	Date of census.	Chief officer of education.
		Boys.	Girls.	Total.		Men.	Women.	Total.	Total.	Per capita of enrollment.	Per capita of population.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
ASIA.														
British India:														
Bombay	1906	504,863	90,125	594,988	3.20	.....	.....	.....	$1,337,882	$2.24	$0.72	18,559,561	1901	Mr. E. Giles, director of public instruction.
Burma (upper and lower).	1904–5	145,360	15,129	160,489	1.52	.....	.....	.....	167,617	1.04	.16	10,490,624	1901	Mr. John Vansomeren Pope, director of public instruction.
Madras	1905–6	664,220	47,454	711,674	1.86	.....	.....	28,019	772,418	1.08	.022	38,209,436	1901	Mr. T. T. Logan, acting director of public instruction.
Mysore	1905–6	55,293	10,091	65,384	1.19	.....	.....	.....	92,571	1.41	.01	5,448,923	1901	Mr. J. Weir, acting inspector-general of education.
Ceylon	1904	140,502	65,403	205,905	5.21	.....	.....	.....	321,890	1.56	.08	[a] 3,950,123	1905	Mr. Herbert Wace, chairman of education committee.
Japan	1904–5	.....	.....	5,144,113	10.8	.....	.....	105,301	13,178,838	2.56	.28	47,812,138	1902	Makino Shinken, minister of state for education.
AFRICA.														
Cape of Good Hope	1906	.....	.....	176,837	7.33	.....	.....	5,992	1,814,670	10.26	.75	2,409,804	1904	Mr. Thomas Muir, superintendent-general of education.
Transvaal	1905	.....	.....	28,540	9.60	.....	.....	979	747,550	26.19	2.51	297,277	1904	Mr. J. E. Adamson, director of education.
Orange River Colony	1906	.....	.....	16,338	11.45	.....	.....	524	516,885	31.63	3.62	142,679	1904	Mr. Hugh Gunn, director of education.
Egypt	1901	.....	.....	165,587	1.7	.....	.....	.....	.....	.....	.....	9,734,405	1897	Saad Pacha Zagloub, minister of public instruction.
Natal	1905–6	14,079	12,230	27,309	13.78	118	224	342	386,836	14.16	1.95	[b] 1,198,027	1904	Mr. C. J. Mudie, superintendent of education.
NORTH AMERICA.														
British Columbia	1906	14,524	13,998	28,522	15.96	.....	.....	690	[c] 720,281	25.25	4.03	178,657	1901	Mr. Alexander Robinson, superintendent of education.
New Brunswick	1906	.....	.....	60,681	.....	.....	.....	1,879	.....	.....	.....	331,120	1901	Mr. James R. Inch, chief superintendent of education.
Nova Scotia	1906	.....	.....	100,332	21.83	366	2,212	2,578	1,073,720	10.70	2.33	459,574	1901	Mr. A. H. Mackay, superintendent of education.
Ontario	1905	.....	.....	446,494	20.04	1,950	7,699	9,649	6,161,236	13.79	2.76	[a] 2,226,933	1905	Hon. R. A. Pyne, minister of education.
Quebec	1905–6	166,967	174,841	341,808	20.72	9,783	1,421	11,204	2,591,657	7.50	1.57	1,648,898	1901	Mr. Boncher de la Bruère, superintendent of education.

Prince Edward Island	1905	10,427	8,845	19,272	18.66	.....	.....	570	168,592	8.74	1.63	103,259	1901	Hon. Alexander Anderson, LL. D., chief superintendent of education.
WEST INDIES.														
Jamaica	1905–6	.....	.....	81,857	10.14	.....	.....	.....	260,405	3.16	.32	806,690	1905	Mr. Thomas Capper, superintending inspector of schools.
CENTRAL AMERICA.														
Costa Rica	1904	12,138	10,688	22,826	6.9	332	511	843	.....	.....	.....	331,340	1904	Luis Anderson, minister of foreign affairs, religion, public instruction, charities, and justice.
Guatemala	1903	.....	.....	36,477	2.0	.....	.....	.....	.....	.....	.....	1,842,134	1903	Lic. A. M. Bocanegra, minister of public instruction.
Honduras	1902	.....	.....	30,025	4.0	.....	.....	.....	61,021	2.03	.80	744,901	1901	Dr. E. C. Fiallos, minister of foreign affairs, acting minister of public instruction.
Nicaragua	1900	.....	.....	17,803	3.6	.....	.....	.....	125,090	7.08	.25	500,000	1900	José D. Gamez, minister of foreign affairs and public instruction.
Salvador	1901	.....	.....	30,177	2.9	.....	.....	.....	.....	.....	.....	1,006,848	1901	Dr. Pio Romero Bosque, minister of interior, public works, and instruction.
SOUTH AMERICA. [i]														
Argentina	1905	.....	.....	543,881	9.6	.....	.....	14,918	[h]13,124,539	25.9	2.31	5,678,197	1905	F. Bibiloni, minister of justice and public instruction.
Bolivia	1906	.....	.....	48,560	.....	.....	.....	1,126	235,959	.....	.....	2,267,935	1906	Dr. J. Saracho, minister of justice and public instruction.
Chile	1905	[d] 101,308	[d] 103,983	[d] 205,291	6.0	[e] 1,139	[e] 3,345	[e] 4,484	2,090,396	10.13	.65	3,205,992	1903	Dom. Amunategui, minister of justice and public instruction.
Colombia	1897	.....	.....	143,076	3.7	.....	.....	.....	844,886	5.91	.22	4,279,674	1905	Dr. J. Rivas Groot, minister of public instruction.
Ecuador	1894	.....	.....	76,878	6.4	.....	.....	1,666	.....	.....	.....	1,205,000	.....	Dr. Alfr. Monje, minister of public instruction, worship, and justice.
Paraguay	1897	.....	.....	25,000	4.7	.....	.....	700	.....	.....	.....	631,347	1905	C. L. Isasi, minister of justice, worship, and public instruction.
Peru	1903	.....	.....	104,970	2.3	.....	.....	2,165	352,285	3.36	.08	4,609,900	1896	——— Wershburn, minister of justice, worship, and public instruction.
Uruguay	1906	[d] 39,477	[d] 35,393	[d] 74,870	7.2	[d] 187	[d] 1,031	[d] 1,118	[e] 859,162	[e] 14.89	[e] 1.21	1,038,086	1904	G. Terra, minister of agriculture, industry, public instruction, and works.
Venezuela	1906	20,044	18,207	38,251	1.1	.....	.....	.....	.....	.....	.....	2,602,492	1905	Dr. J. A. Baldó, minister of public instruction.
AUSTRALASIA.														
Queensland	1906	.....	.....	95,415	18.95	1,153	1,249	2,402	1,472,450	15.43	2.92	503,266	1901	Mr. A. H. Barlow, secretary for public instruction.
South Australia	1906	.....	.....	57,270	15.79	407	1,019	1,426	731,634	12.77	2.01	362,604	1901	Hon. Thomas Price, minister controlling education.
Victoria	1905–6	117,745	110,351	228,096	18.85	1,874	2,719	4,593	[f] 2,655,123	11.64	2.19	[a] 1,209,860	1905	Hon. A. O. Sachse, minister of public instruction.
West Australia	1906	15,135	13,792	28,927	15.71	359	553	912	611,501	21.13	3.32	184,124	1901	Hon. Frank Wilson, minister of education.
New Zealand	1906	72,917	66,385	139,302	15.67	1,887	3,201	[g] 3,872	3,243,136	23.28	3.64	888,578	1906	Hon. George Fowlds, minister of education.
Tasmania	1906	.....	.....	22,622	13.11	192	354	546	281,000	12.42	1.62	172,475	1901	Hon. W. B. Propsting, minister of education.

[a] Estimated.
[b] Also 910,727 natives for whom there are 165 government-aided schools, with an enrollment of 10,150 pupils.
[c] Included $26,314 for sites and buildings.
[d] Public and private.
[e] Public only.
[f] Not including expenditure for buildings.
[g] Also 671 pupil teachers.
[h] In 1900.
[i] No data on instruction in Brazil.

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CHAPTER XVII.

EDUCATIONAL PERIODICALS.

LIST OF EDUCATIONAL PERIODICALS CURRENTLY RECEIVED BY THE LIBRARY OF THE BUREAU OF EDUCATION AND OTHER LIBRARIES IN THE DISTRICT OF COLUMBIA.[a]

LIST OF ABBREVIATIONS.

Agr., Department of Agriculture.
DCT., District of Columbia Teachers' Library.
Ed., Bureau of Education.
LC., Library of Congress.
PL., Public Library.
Sm., Smithsonian Institution.
bm., bi-monthly.
ir., irregular.
m., monthly.
q., quarterly.
sm., semi-monthly.
w., weekly.

Alexander's magazine. Boston. m.....LC.
Allgemeine deutsche Lehrerzeitung. Leipzig. w.....Ed.
American education. Albany. m.....LC. Ed. PL.
American educational review. Chicago. m.....LC. Ed.
American journal of religious psychology and education. Worcester. q.....LC. Ed. Sm.
American physical education review. Boston. q.....Ed.
American primary teacher. Boston. m.....LC. Ed.
American school board journal. Milwaukee. m.....LC. Ed.
Amtliches Schulblatt des Kantons Zürich. Zürich. m.....Ed.
Archiv für schweizerische Schulgeschichte. Bern. ir.....Ed.
Archivos de pedagogía y ciencias afines.....Ed.
Arkansas school journal. Little Rock. m.....Ed.
Atlantic educational journal. Baltimore. m.....LC. Ed. PL. Agr.
Aus der Schule für die Schule. Leipzig. m.....Ed.

Blätter für Knabenhandarbeit. Leipzig. m.....Ed.
Boletín de educación. Argentina. m.....Ed.
Boletín de instrucción pública. Mexico. m.....LC. Ed.
Boletín de la institución libre de enseñanza. Madrid. m.....Ed.
Bollettino mensile della lega magistrale fra gl' insegnanti elementari della città e della provincia. Catania. m.....Ed.
Bollettino ufficiale del Ministero dell' instruzione pubblica. Roma. w.....Ed.
Boston cooking school magazine. Boston. m.....LC. Ed.
Bulletin administratif du Ministère de l'instruction publique. Paris. w.....Ed.
Business educator. Columbus. m.....LC.

[a] This list does not include, except incidentally, university, college, and school publications, or other serials, separate lists of which will be published in ensuing reports. Titles of periodicals received by the Library of Congress have been kindly furnished by Dr. J. D. Wolcott, of the Library of Congress.

California education. San José. q.....Ed.
Canadian teacher. Toronto. m.....Ed.
Catholic school journal. Milwaukee. m.....Ed.
Chicago board of education. Bulletin. Chicago. ir.....LC. Ed.
Chicago teachers' federation. Bulletin. Chicago. w.....Ed.
Child-study. London. q.....LC.
Christian educator. Cincinnati. q.....LC.
Christian student. New York. q.....Ed.
Colorado school journal. Denver. m.....LC. Ed.
Comenius-Blätter für Volkserziehung. Berlin. 5 nos.....LC.
Cornell rural school leaflet. Ithaca.....LC. Ed.
Country school champion. New Albany, Kans. m.....Ed.
County superintendents' monthly. Fremont, Nebr. m.....LC.
Cuba pedagógica. Havana. sm.....Ed.

Deutsche Schule. Leipzig. m.....Ed.

École pratique. Liège. m.....Ed.
École primaire. Bruxelles. bm.....Ed.
Education. Boston. m.....LC. Ed. PL. DCT.
Éducation familiale. Bruxelles. m.....Ed.
Education gazette. Cape Town (Africa). sm.....Ed.
Education gazette. Victoria (Australia). m.....Ed.
Education gazette and teachers' aid. Victoria. m.....Ed.
Educational bi-monthly. Chicago. bm.....Ed.
Educational exchange. Birmingham. m.....Ed.
Educational foundations. New York. m.....LC. Ed. PL.
Educational messenger. College View (Nebr.). w.....Ed.
Educational news. Edinburgh. w.....Ed.
Educational press bulletin. Springfield (Ill.). m.....Ed.
Educational record. Hobart (Tasmania). m.....Ed.
Educational record. London. q.....LC. Ed.
Educational record of the province of Quebec. Montreal. m.....LC. Ed.
Educational review. New York. m.....LC. Ed. Agr. PL. DCT.
Educational review. Madras (India). m.....Ed.
Educational review. St. John (New Brunswick). m.....Ed.
Educational times. London. m.....LC. Ed.
Educationist. Madras (India). w.....Ed.
Educator-journal. Indianapolis. m.....Ed.
Educazione dei bambini. Roma. sm.....Ed.
Elementary school teacher. Chicago. m.....LC. Ed. PL.
Enseignement mathématique. Paris. bm.....LC.
Enseignement secondaire. Saint-Cloud (France). sm.....Ed.
Enseignement secondaire des jeunes filles. Paris. m.....Ed.
Enseignement supérieur libre de l'Institut catholique. Paris. bm.....Ed.
Enseñanza normal. Mexico. sm.....Ed.
Escuela mexicana. Mexico. w.....Ed.
Escuela moderna. Havana. sm.....LC. Ed.
Escuela moderna. Madrid. m.....Ed.
Evangelisch-Lutherisches Schulblatt. St. Louis. m.....Ed.

Florida school exponent. Tallahassee. m.....Ed.
Folkskolans van. Göteborg. w.....Ed.
Fortbildungsschüler. Solothurn (Switzerland). bm.....Ed.

Gymnastique scolaire. Nivelles (Belgium). m.....Ed.

Harmsworth self-educator magazine. New York. m.....LC.
Hochschul-Nachrichten. München. m.....Ed.
Home education. Chicago. q.....Ed.
Hygiène scolaire. Paris.....LC.

Indian journal of education. Madras.....LC.
Indian leader. Lawrence (Kans.). w.....LC.
Indian school journal. Chilocco (Okla.). m.....LC. Ed.
Instrucción primaria. Havana. sm.....LC. Ed.
Instructor. Aguascalientes (Mexico). m.....LC. Ed.
Intercollegian. New York. m.....LC. Ed.
Inter-mountain educator. Dillon, Mont. m.....Ed.
Internationales Archiv für Schulhygiene. Leipzig. q.....Ed.
Interstate schoolman. Hutchinson (Kans.). m.....Ed.
Irish educational review. Dublin. m.....Ed.

Journal d'éducation populaire. Paris. q.....Ed.
Journal of education. Boston. w.....LC. Ed. Agr.
Journal of education. London. m.....LC. Ed.
Journal of education. Toronto. m.....Ed.
Journal of the minister of public instruction. St. Petersburg. m. (In Russian).....Ed.

Kindergarten-primary magazine. New York. m.....LC. Ed. PL.
Kindergarten review. Springfield (Mass.). m.....LC. Ed. PL.

Lehrerin in Schule und Haus. Langensalza. w.....Ed.
Lehrproben und Lehrgänge aus der Praxis der Gymnasien und Realschulen. Halle a. S. bm.....Ed.
London teacher. London. m.....Ed.
Louisiana school review. New Orleans. m.....Ed.

Magisterio español. Madrid. w.....Ed.
Manual training magazine. Peoria. bm.....LC. Ed. PL.
Manual training teacher. St. Albans (England).....Ed.
Manuel général de l'instruction primaire. Paris. w.....Ed.
Mathematical gazette. London. m.....Ed.
Midland schools. Des Moines. m.....Ed. Agr.
Mind and body. Milwaukee. m.....LC. Ed.
Missouri school journal. Jefferson City (Missouri). m.....Ed.
Moderator-topics. Lansing (Michigan). w.....LC. Ed. Agr.
Modern language teaching. London. m.....Ed.
Monatshefte für den naturwissenschaftlichen Unterricht. Leipzic and Berlin. m.....LC.
Monatshefte für deutsche Sprache und Pädagogik. Milwaukee. m.....Ed.
Monitor de la educáción común. Buenos Aires. m.....LC. Ed.

National new education. Milwaukee. m.....LC. Ed.
Nature-study review. New York. m.....LC. Ed. Agr.
Nebraska teacher. Lincoln. m.....Ed.
Nemaha county teacher. Auburn (Nebraska). m.....Ed.
Neue Bahnen. Leipzig. m.....Ed.
New Mexico journal of education. Albuquerque (New Mexico).. Ed.
New York teachers' monographs. q.....LC.

New Zealand schoolmaster. Christchurch. m.....Ed.
Normal instructor. Dansville (New York). m.....LC. Ed.
Norsk skoletidende. Hamar (Norway). w.....LC. Ed.
North Carolina journal of education. Durham, N. C. m.....Ed.
Northwest journal of education. Seattle. m.....Ed. Agr.
Nuovi doveri. Revista quindicinale di problemi educativi. Palermo. sm.....Ed.

Oesterreichischer Schulbote. Wien. m.....Ed.
Ohio educational monthly. Columbus. m.....LC. Ed.
Ohio teacher. Athens. m.....LC. Ed.
Oklahoma school herald. Oklahoma City. m.....Agr.
Opvoeding. Maaseyck, Belgium. m.....Ed.
Oregon teachers' monthly. Salem. m.....LC. Ed.

Pädagogische Blätter. Gotha. m.....Ed.
Pädagogische Studien. Dresden. bm.....Ed.
Pädagogische Zeitung. Berlin. w.....Ed.
Pädagogisches Archiv. Leipzig. m.....LC. Ed.
Parents' review. London. m.....LC. Ed.
Pedagogical seminary. Worcester. q.....LC. Ed. PL. DCT.
Pennsylvania school journal. Lancaster. m.....Ed.
People. West Somerville station, Boston. q.....LC. Ed.
Periodische Blätter für Realienunterricht und Lehrmittelwesen. Wien. bm.....Ed.
Pestalozzianum. Zürich. m.....LC. Ed.
Philippine education. Manila (P. I.). m.....Ed.
Popular educator. Boston. m.....LC. Ed.
Posse gymnasium journal. Boston. m.....Ed.
Practical teacher. London. m.....Ed.
Praktische Schulmann. Leipzig. (8 nos.).....Ed.
Primary education. Boston. m.....LC. Ed.
Primary plans. Dansville (New York). m.....LC.
Progressive teacher. Nashville. m.....LC. Ed.
Prosvetni glasnik. Belgrade. m.....LC.
Public school journal. Cincinnati. sm.....Ed.

Queensland educational journal. Brisbane. m.....Ed.

Religious education. Chicago. bm.....LC. Ed.
Revista de instrucción primaria. Santiago de Chile. m.....Ed.
Revista pedagógica. Roma. m.....Ed.
Revue internationale de l'enseignement. Paris. m.....LC. Ed.
Revue pédagogique. Paris. m.....LC. Ed.
Rocky mountain educator. Denver. m.....Ed.
Rotary. Lisbon (North Dakota). m.....LC.

Sammlung pädagogischer Vorträge. Minden. bm.....Ed.
Sangamon school interests. Springfield (Illinois). m.....Ed.
School. New York. w.....LC. Ed.
School. London. m.....Ed.
School and home. Atlanta, Ga. m.....Ed.
School and home education. Bloomington (Illinois). m.....LC. Ed.
School arts book. Worcester. m.....LC. Ed.

School bulletin. Syracuse (New York). m.....Ed.
School century. Oak Park (Illinois). m.....Ed. PL.
School education. Minneapolis. m.....LC. Ed.
School exchange. Newark. bm.....LC. Ed.
School government chronicle. London. w.....Ed.
School guardian. London. m.....LC. Ed.
School journal. New York. w.....LC. Ed. PL.
School journal. Wellington (New Zealand).....LC.
School life. Dayton (Ohio). m.....LC. Ed.
School music. Keokuk (Iowa). bm.....LC. Ed.
School music review. London. m.....Ed.
School news and practical educator. Taylorville (Illinois). m..LC. Ed. Agr.
School physiology journal. Boston. m.....LC. Ed.
School reporter. Chicago. m.....Ed.
School review. Chicago. m.....LC. Ed. PL.
School science. Chicago. m.....LC. Ed.
School work. New York. q.....LC. Ed. PL.
School world. London. m.....Ed.
Schoolmaster. London. w.....Ed.
Schulzimmer. Charlottenburg (Germany). q.....Ed.
Schweizerische Lehrerzeitung. Zürich. w.....Ed.
Sierra educational news. San Francisco. m.....Ed.
Skolebladet. Kristiania. w.....Ed.
Social education quarterly. Boston. q.....Ed.
South Dakota educator. Mitchell (South Dakota). m.....Ed.
South Dakota state journal of education. Madison. m.....LC.
Southern educational review. Chattanooga (Tennessee). m.....Ed. PL. Agr.
Southern school journal. Lexington (Kentucky). m.....Ed.
Southern workman. Hampton. m.....LC. Ed.
Svensk Läraretidning. Stockholm. w.....Ed.

Teacher. Philadelphia. m.....Ed.
Teachers' assembly herald. Baguio, P. I. w.....LC. Ed.
Teachers' bulletin, University of Cincinnati. m.....LC. Ed.
Teachers' college record. New York. m.....LC. Ed. PL.
Teachers' journal. Marion (Indiana). m.....LC.
Teachers' leaf. Cleveland. q.....Ed.
Teachers' magazine. New York. m.....LC. Ed. PL.
Teachers' monographs. See New York teachers' monographs....LC.
Technik und Schule. Leipzig. q.....Ed.
Technology review. Boston. q.....LC. Ed.
Tehama county school journal. Red Bluff, Cal. m.....Ed.
Texas school journal. Dallas. m.....LC. Ed. Agr.
Texas school magazine. Dallas. m.....Ed.
Tribune scolaire. Liège. bm.....Ed.

Verdandi. Stockholm.....LC.
Verordnungsblatt des grossherzöglich badischen Oberschulrats. Karlsruhe. ir.....Ed.
Verordnungsblatt des K. K. Ministeriums f. Kultus u. Unterricht. Wien. sm.....Ed.
Vierteljahrhefte für den geographischen Unterricht. Wien. q...Ed.
Vierteljahrsschrift für körperliche Erziehung. Wien. q.....Ed.
Virginia journal of education. Richmond. m.....Ed.
Vor ungdom. Copenhagen. bm.....LC. Ed.

West Virginia school journal. Morgantown. m.....Ed. Agr.
Western journal of education. San Francisco. m.....Ed.
Western journal of education. Ypsilanti, Mich. m.....Ed.
Western school journal. Topeka. m.....LC. Ed.
Western teacher. Milwaukee. m.....Ed.
Westland educator. Lisbon (North Dakota). m.....LC.
Wisconsin journal of education. Madison. m.....Ed. Agr.
Wyoming school journal. Laramie (Wyoming). m.....Ed.

Zeitschrift für den physikalischen und chemischen Unterricht. Berlin. bm.....Ed.
Zeitschrift für deutsche Wortforschung. Strassburg. q.....Ed.
Zeitschrift für experimentelle Pädagogik. Münster. sm.....Ed.
Zeitschrift für Kinderforschung. Langensalza. m.....Ed.
Zeitschrift für lateinlose höhere Schulen. Leipzig. m.....Ed.
Zeitschrift für Lehrmittelwesen und pädagogische Literatur. Wien m.....Ed.
Zeitschrift für mathematische und naturwissenschaftlichen Unterricht. Leipzig. m?.....LC.
Zeitschrift für Philosophie und Pädagogik. Langensalza. m.....Ed.
Zeitschrift für Schulgeographie. Wien. m.....Ed.
Zeitschrift für Schulgesundheitsflege. Zürich. m.....Ed.
Zentralblatt für die gesamte Unterrichtsverwaltung in Preussen. Berlin. m.....Ed.

CHAPTER XVIII.

EDUCATIONAL DIRECTORY.[a]

I.—Chief State School Officers.

Name.	Address.	Official designation.
H. C. Gunnels	Montgomery, Ala	State superintendent of education.
R. L. Long	Phoenix, Ariz	Territorial superintendent of public instruction.
George B. Cook	Little Rock, Ark	State superintendent of public instruction.
Edward Hyatt	Sacramento, Cal	Do.
Miss Katherine L. Craig	Denver, Colo	Do.
Charles D. Hine	Hartford, Conn	Secretary of State board of education.
Thomas C. Roe	Dover, Del	Do.
A. T. Stuart	Washington, D. C	Superintendent of District schools.
W. M. Holloway	Tallahassee, Fla	State superintendent of public instruction.
Jere M. Pound	Atlanta, Ga	State school commissioner.
S. Belle Chamberlain	Boise, Idaho	State superintendent of public instruction.
Frank G. Blair	Springfield, Ill	Do.
F. A. Cotton	Indianapolis, Ind	Do.
John F. Riggs	Des Moines, Iowa	Do.
E. T. Fairchild	Topeka, Kans	Do.
J. G. Crabbe	Frankfort, Ky	Do.
T. H. Harris	Baton Rouge, La	State superintendent of public education.
Payson Smith	Augusta, Me	State superintendent of public schools.
M. Bates Stephens	Annapolis, Md	State superintendent of public education.
George H. Martin	Boston, Mass	Secretary of State board of education.
Luther L. Wright	Lansing, Mich	State superintendent of public instruction.
J. W. Olsen	St. Paul, Minn	Do.
J. N. Powers	Jackson, Miss	State superintendent of public education.
Howard A. Gass	Jefferson City, Mo	State superintendent of public schools.
W. C. Harmon	Helena, Mont	State superintendent of public instruction.
J. L. McBrien	Lincoln, Nebr	Do.
Orvis Ring	Carson, Nev	Do.
H. C. Morrison	Concord, N. H	Do.
Chas. J. Baxter	Trenton, N. J	Do.
J. F. Clark	Santa Fe, N. Mex	Territorial superintendent of public instruction.
Andrew S. Draper	Albany, N. Y	State commissioner of education.
J. Y. Joyner	Raleigh, N. C	State superintendent of public instruction.
W. L. Stockwell	Bismarck, N. Dak	Do.
E. A. Jones	Columbus, Ohio	State commissioner of common schools.
E. D. Cameron	Guthrie, Okla	State superintendent of public instruction.
J. H. Ackerman	Salem, Oreg	Do.
Nathan C. Schaeffer	Harrisburg, Pa	Do.
Walter E. Ranger	Providence, R. I	Commissioner of public schools.
O. B. Martin	Columbia, S. C	State superintendent of education.
H. A. Ustrud	Pierre, S. Dak	State superintendent of public instruction.
R. L. Jones	Nashville, Tenn	Do.
R. B. Cousins	Austin, Tex	Do.
A. C. Nelson	Salt Lake City, Utah	Do.
Mason S. Stone	Montpelier, Vt	State superintendent of education.
J. D. Eggleston, jr	Richmond, Va	State superintendent of public instruction.
Henry B. Dewey	Olympia, Wash	Do.
Thomas C. Miller	Charleston, W. Va	State superintendent of free schools.
C. P. Cary	Madison, Wis	State superintendent of public schools.
A. D. Cook	Cheyenne, Wyo	State superintendent of public instruction.
Wm. B. Hoggatt	Juneau, Alaska	Governor, and ex officio superintendent of education.
W. H. Babbitt	Honolulu, Hawaii	Superintendent of public instruction.
D. P. Barrows	Manila, P. I	Director of education.
E. G. Dexter	San Juan, P. R	Commissioner of education.

[a] Corrected to the middle of September, 1908, in so far as changes have been reported to the Bureau.

II.—City Superintendents, 1907–8.[a]

(Cities of 4,000 population and upward.)

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per annum.
ALABAMA.					
Anniston	9,695	D. R. Murphy	(b)	(b)	(b)
Bessemer	6,358	Joseph M. Dill	(b)	(b)	(b)
Birmingham	38,415	John Herbert Phillips	5	May —, 1908	$3,600
Eufaula	4,532	Frank Lee McCoy	1	Dec. —, 1909	1,800
Florence	6,478	James Bothwell Lockhart	2	June 26, 1909	1,200
Gadsden	4,282	Walter E. Striplin	2	June —, 1909	1,700
Huntsville	8,068	George D. Godard[c]	1	June 30, 1908	1,500
Mobile	38,469	S. S. Murphy	4	Aug. —, 1908	3,000
Montgomery	30,346	Charles Lewis Floyd	2	July 1, 1909	2,500
New Decatur	4,437	Arthur Fort Harman[d]	2	July 1, 1908	1,600
Opelika	4,245	Isaac William Hill	2	June 1, 1909	2,000
Phoenix	4,163	J. A. Albright	(b)	(b)	(b)
Pratt City	3,485	Perry M. McNeil[e]	1	May 22, 1908	1,100
Selma	8,713	Miss Emily Florence Ferguson	1	May 31, 1908	1,500
Talladega	5,056	D. A. McNeil	(b)	(b)	(b)
Troy	4,097	John P. Selman	3	—— —, 1908	1,500
Tuscaloosa	5,094	James H. Foster	1	June 30, 1908	2,100
Woodlawn	2,848	James Dean Williams	1	July 1, 1908	1,500
ARIZONA.					
Phoenix	5,544	J. F. Stillwell	(b)	(b)	(b)
Tucson	7,531	William Morrison Ruthrauff	1	July 1, 1908	2,400
ARKANSAS.					
Fayetteville	4,061	Frank S. Root	1	June —, 1908	1,200
Fort Smith	11,587	J. W. Kuykendall	1	June 1, 1908	2,400
Helena	5,550	Samuel Hamilton Spragins	1	June 5, 1908	1,500
Hot Springs	9,973	George B. Cook[f]	1	June 30, 1908	2,400
Jonesboro	4,508	D. T. Rogers	(b)	(b)	(b)
Little Rock	38,307	Burr Walter Torreyson	2	June 1, 1909	2,800
Paragould	3,324	H. R. Partlow	(b)	(b)	(b)
Pine Bluff	11,496	Junius Jordan	1	May 31, 1908	2,000
Texarkana	4,914	Frank Ward Miller[g]	1	July 1, 1908	1,800
CALIFORNIA.					
Alameda	16,464	Fred Thompson Moore	4	May 1, 1911	3,000
Bakersfield	4,836	David Whitson Nelson	4	July 1, 1910	1,725
Berkeley	13,214	Sylvanus D. Waterman[h]	4	June 30, 1909	2,400
Eureka	7,327	D. L. Thornbury[i]	4	July 1, 1911	1,800
Fresno	12,470	C. L. McLane	4	July 1, 1909	2,760
Grass Valley	4,719	J. S. Hennessy	(b)	(b)	(b)
Los Angeles	102,479	Ernest Carroll Moore	4	June —, 1910	4,250
Napa	4,036	John L. Shearer[j]	(b)	(b)	(b)
Oakland	66,960	John William McClymonds	4	Apr. 1, 1909	3,300
Pasadena	9,117	Arthur L. Hamilton	4	June 30, 1911	2,700
Petaluma	3,871	A. J. Hamilton[k]	(b)	(b)	(b)
Pomona	5,526	Parke W. Kauffman	4	July 1, 1910	2,400
Redlands	4,797	Lewis B. Avery[l]	1	June —, 1908	2,700
Riverside	7,973	Arthur N. Wheelock	1	June 30, 1908	2,400
Sacramento	29,282	Oliver Wm. Erlewine	4	Jan. 1, 1910	2,700
San Bernardino	6,150	F. W. Conrad	1	June 16, 1908	1,800
San Diego	17,700	Duncan MacKinnon	4	July 1, 1910	2,400
San Francisco	348,782	Alfred Roncovieri	4	Jan. —, 1911	4,000
San Jose	21,500	Alexander Sherriffs	4	July 1, 1910	2,500
San Rafael	3,879	John S. Drew[k]	1	July 1, 1908	1,800
Santa Ana	4,933	John A. Cranston	4	July —, 1910	2,250
Santa Barbara	6,587	Henry Augustus Adrian	4	June 30, 1909	2,500
Santa Clara	3,650	W. J. Hayward	2	July —, 1908	1,200
Santa Cruz	5,659	John W. Linscott	1	June 30, 1908	2,400
Santa Rosa	6,673	E. Morris Cox[m]	1	June —, 1908	2,200
Stockton	17,506	James A. Barr	4	Oct. 19, 1911	3,000
Vallejo	7,965	Howard Ford[k]	(b)	(b)	(b)
Watsonville	3,528	Thomas Smith MacQuiddy	1	June 30, 1908	1,800

[a] Changes later than July 1, 1908, appear in the form of footnotes.
[b] No data.
[c] Resigned; successor for 1908–9 not known.
[d] Samuel Adams, 1908–9.
[e] E. O. Sanders, 1908–9.
[f] Frank Ward Miller, 1908–9.
[g] E. A. Brennan, 1908–9.
[h] Frank H. Bunker, 1908–9.
[i] George B. Albee, 1908–9.
[j] For 1906–7; no later information.
[k] Supervising principal.
[l] Wayne P. Smith, 1908–9.
[m] J. E. Williamson, 1908–9.

II.—City Superintendents, 1907–8—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per annum.
COLORADO.					
Aspen	3,303	E. A. Lanning [a]	(b)	(b)	(b)
Boulder	6,150	William V. Casey	(b)	(b)	(b)
Canyon City	3,775	F. F. Thompson	(b)	(b)	(b)
Colorado Springs	21,085	John Dietrich [c]	(b)	(b)	(b)
Cripple Creek	10,147	Wilson M. Shafer	1	Sept. —, 1908	$2,750
Denver	133,859	Charles E. Chadsey	3	Sept. 1, 1910	5,000
Florence	3,728	Elmer A. Kenyon	1	May 28, 1908	1,500
Grand Junction	3,503	John Henry Allen	3	May —, 1910	2,000
Leadville	12,455	Frederick P. Austin	1	Sept. 1, 1908	2,200
Pueblo:					
District No. 1	28,157	George W. Loomis [d]	3	Sept. —, 1908	3,500
District No. 20		John Francis Keating	3	July 1, 1909	4,000
Salida	3,722	Edgar Kesner	1	June 30, 1908	1,500
Trinidad	5,345	Jay P. Treat	(f)	(f)	1,900
Victor [e]	4,986	Wilson M. Shafer	1	Sept. —, 1908	2,750
CONNECTICUT.					
Ansonia	12,681	Edwin Carleton Andrews	1	July 14, 1908	2,000
Bridgeport	70,996	Charles W. Deane	3	Aug. 20, 1909	3,900
Bristol	6,268	Newell Jennings	1	July 14, 1908	(b)
Danbury	19,474	George H. Tracy	(f)	(f)	(f)
Derby	7,930	John W. Peck	(f)	(f)	2,000
Hartford	79,850	Thomas S. Weaver	1	June 1, 1908	2,000
Manchester:					
Town schools	10,601	Edward D. MacCollum [c]	(b)	(b)	(b)
Ninth district (south).		Fred A. Verplanck [c]	(b)	(b)	(b)
Meriden	28,695	William Powers Kelly	3	Aug. 1, 1910	3,000
Middletown	9,589	Clarence Hood Woolsey	1	June —, 1908	2,500
Naugatuck	10,541	Frank Warren Eaton	1	July 1, 1908	2,200
New Britain	25,998	Stanley H. Holmes	1	Aug. —, 1908	3,200
New Haven	108,027	Frank Herbert Beede	5	—— —, 1911	3,800
New London	17,548	Charles B. Jennings	1	—— —, 1908	2,100
Norwalk	19,932	Abiathar Blanchard [g c]	(b)	(b)	(b)
Norwich:					
Central district	17,251	Nathan Lee Bishop	1	June —, 1908	2,400
West Chelsea district.		John Byron Stanton	1	July 1, 1908	1,700
Putnam	6,667	W. R. Barber [g]	(b)	(b)	(b)
Rockville	7,287	Harry B. Marsh [c h]	(b)	(b)	(b)
Southington	5,890	Charles M. Morse	1	July —, 1908	1,600
South Norwalk	6,591	W. C. Foote [j]	(b)	(b)	(b)
Stamford	15,997	Everett C. Willard	1	July 1, 1908	3,000
Torrington	8,360	Edwin H. Forbes	1	Sept. —, 1908	2,500
Wallingford	6,737	Clinton S. Marsh	1	July 31, 1908	2,500
Waterbury	45,859	Berlin Wright Tinker	2	July 1, 1909	3,400
West Haven	5,247	Edgar C. Stiles	1	July 1, 1908	2,550
Willimantic	8,937	(b)	(b)	(b)	(b)
Winsted	6,804	William Henry Millington	1	July 15, 1908	1,500
DELAWARE.					
Wilmington	76,508	George Wells Twitmyer	2	June 30, 1909	2,500
DISTRICT OF COLUMBIA.					
Washington	278,718	Alexander T. Stuart [k]	3	Jan. 6, 1908	5,000
FLORIDA.					
Jacksonville	28,429	(b)	(b)	(b)	(b)
Key West	17,114	J. V. Harris [c i]	(b)	(b)	(b)
Lake City	4,013	T. H. Owens [c i]	(b)	(b)	(b)
Palatka	3,301	L. K. Tucker [c i]	(b)	(b)	(b)
Pensacola	17,747	Nathan B. Cook [i]	4	Jan. 1, 1909	2,100
St. Augustine	4,272	R. B. Rutherford [i]	(b)	(b)	(b)
Tampa	15,839	W B. Dickinson [i]	4	Jan. 3, 1909	2,400

[a] James Henry Adams, 1908–9.
[b] No data.
[c] For 1906–7; no later information.
[d] Milton C. Potter, 1908–9.
[e] Included in Cripple Creek district.
[f] Indefinite.
[g] Secretary, board of school visitors.
[h] Principal of high school.
[i] County superintendent.
[j] William Estabrook Chancellor, 1908–9.
[k] Succeeded William E. Chancellor, January 4, 1908.

II.—City Superintendents, 1907–8—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per annum.
GEORGIA.					
Albany	4,606	S. R. de Jarnette	1	July 1,1908	$1,600
Americus	7,674	Augustus Griffin Miller	1	....do....	1,800
Athens	10,245	George Glenn Bond	3	June 30,1908	2,000
Atlanta	89,872	William Martin Slaton	1	June 5,1908	3,000
Augusta	39,441	Lawton Bryan Evans	1	July 1,1909	3,000
Brunswick	9,081	Nathaniel Harrison Ballard	1	....do....	2,400
Columbus	17,614	Carleton B. Gibson	1	....do....	2,250
Dalton	4,315	Julius Martin Weatherly	1	May 22,1908	1,200
Dublin	2,987	Kyle Terry Alfriend	1	June 1,1908	1,500
Elberton	3,834	Wilber Colvin	1	June 30,1908	1,500
Gainesville	4,382	E. J. Robeson	1	June 1,1908	1,500
Griffin	6,857	Charles B. Mathews [a]	(b)	(b)	(b)
Lagrange	4,274	Clifford Lewis Smith	1	May 31,1908	1,560
Macon	23,272	Carleton B. Chapman	1	June 19,1908	2,400
Marietta	4,446	William T. Dumas	1	June 1,1908	1,575
Milledgeville	4,219	W. E. Reynolds [a]	(b)	(b)	(b)
Newnan	3,654	Charles Kennon Henderson, jr	1	June 3,1908	1,500
Rome	7,291	James C. Harris	2	July 1,1909	2,000
Savannah	71,239	Otis Ashmore	1	June —,1908	3,600
Thomasville	5,322	Alexander B. Christy	1	May 22,1908	1,300
Valdosta	5,613	Roland Bird Daniel	1	June 1,1908	1,575
Waycross	5,919	E. Aldine Pound	1	June —,1908	2,220
IDAHO.					
Boise	5,957	J. E. Williamson [c]	1	Sept. —,1908	2,500
Pocatello	4,046	Walter R. Siders	1	June 1,1908	2,750
ILLINOIS.					
Alton	14,210	Robert A. Haight	1	July 1,1908	2,250
Aurora:					
District No. 4 (west side).	24,147	A. V. Greenman	1	June 18,1908	2,300
District No. 5 (east side).		C. M. Bardwell	1	July 1,1908	2,800
Batavia	3,871	Lawrence F. Wentzel [d]	1	Aug. —,1908	1,600
Beardstown	4,827	Joseph Gladden Hutton	1	June 1,1908	1,400
Belleville	17,484	George S. Busick	1	....do....	2,200
Belvidere:					
North side	6,937	Eugene D. Merriman	1	June —,1908	1,600
South side		C. H. LeVitt [a]	(b)	(b)	(b)
Bloomington	23,286	J. K. Stableton	(b)	(b)	(b)
Blue Island	6,114	J. E. Lemon	1	June —,1908	3,000
Cairo	12,566	Taylor C. Clendenen	1	June 15,1908	2,400
Canton	6,564	G. W. L. Meeker	1	May —,1908	1,850
Centralia	6,721	Samuel Hallam Bohn	1	June 2,1908	1,500
Champaign	9,098	Frank Dickinson Haddock [e]	1	Aug. 1,1908	2,000
Charleston	5,488	De Witt Elwood	1	June 30,1908	1,800
Chicago	1,698,575	Edwin Gilbert Cooley	1	—— —,1908	10,000
Chicago Heights	5,100	Francis Martin Richardson	1	July 1,1908	2,200
Clinton	4,452	Henry H. Edmunds	1	June 1,1908	1,350
Collinsville	4,021	Samuel J. Curlee [a]	(b)	(b)	(b)
Danville	16,354	Lin H. Griffith	1	Aug. 1,1908	2,500
Decatur	20,754	Harry B. Wilson	1	Sept. 1,1908	2,200
De Kalb	5,904	Luther A. Hatch	1	July —,1908	1,800
Dixon:					
North side	7,917	H. V. Baldwin	1	May 31,1908	1,500
South side		Vernon Griffith Mays	1	....do....	1,600
Duquoin	4,353	Charles William Houk	1	May 28,1908	1,500
East St. Louis	29,655	John E. Miller	1	July 31,1908	2,500
Edwardsville	4,157	Heywood Coffield	1	June —,1908	1,400
Effingham	3,774	Thomas B. Sullins	1	May 31,1908	1,080
Elgin	22,433	Robert I. White	1	July 1,1908	2,200
Evanston:					
District No. 75	19,259	Homer H. Kingsley	1	June 30,1908.	3,500
District No. 76		Fred W. Nichols	1	July 1,1908	3,250
Forest Park [f]	.....	Asa P. Goddard	1	June —,1908	1,100
Freeport	13,258	Sigel Elza Raines	1	....do....	2,400
Galena	5,005	Benjamin L. Birkbeck	1	June 5,1908	1,200
Galesburg	18,607	William L. Steele	1	June 30,1908	2,700
Harvey	5,395	Frank C. Miller	1	—— —,1908	1,800
Hoopeston	3,823	Arthur Verner	1	May 31,1908	1,500

[a] For 1906–7; no later information.
[b] No data.
[c] Charles Meek, 1908–9.
[d] J. N. Adee, 1908–9.
[e] Succeeded March 7, 1908, by W. W. Earnest.
[f] Formerly Harlem.

II.—City Superintendents, 1907–8—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per annum.
ILLINOIS—continued.					
Jacksonville	15,078	William A. Furr	1	June 1, 1908	$2,000
Joliet	29,353	John Andrews Long	1	July 1, 1908	2,800
Kankakee	13,595	Franklin N. Tracy	1	....do....	2,000
Kewanee	8,382	Robinson G. Jones	1	June 1, 1908	2,000
La Grange	3,969	F. E. Sanford	(a)	(a)	(a)
La Salle	10,446	James B. McManus	1	June 20, 1908	1,700
Lincoln	8,962	Leander Dallas Ellis	1	May 30, 1908	1,700
Litchfield	5,918	C. E. Richmond	1	June 1, 1908	1,500
Macomb	5,375	James Clinton Burns	1	Sept. 1, 1908	1,500
Mattoon	9,622	Gilbert P. Randle	1	June 30, 1907	2,000
Maywood	4,532	John Porter Adams	1	June 18, 1908	2,000
Mendota (east side)	3,736	G. B. Coffman	1	June —, 1908	1,300
Metropolis	4,069	F. C. Prowdley	1	Aug. 1, 1908	1,100
Moline	17,248	Bennett B. Jackson	1	June —, 1908	2,300
Monmouth	7,460	W. R. Snyder [b]	(a)	(a)	(a)
Morris	4,273	Rupert Simpkins [b]	(a)	(a)	(a)
Mount Carmel	4,311	Walter S. Booth	1	June 1, 1908	1,500
Mount Vernon	5,216	William Miner	1	May 1, 1908	1,500
Murphysboro	6,463	William Calhoun	(a)	(a)	(a)
Normal	3,795	Herbert Bassett	1	June —, 1908	1,800
Olney	4,260	J. O. Marberry	1	May 31, 1908	1,200
Ottawa	10,588	Christopher J. Byrne	1	June 30, 1908	1,800
Pana	5,530	Clarence E. Avis [c]	1	May 22, 1908	1,300
Paris	6,105	E. B. Brooks [b]	(a)	(a)	(a)
Pekin	8,420	James J. Crosby	1	June 12, 1908	1,700
Peoria	56,100	Gerard T. Smith [b]	(a)	(a)	(a)
Peru	6,863	James Robert Hart	1	June —, 1908	1,500
Pontiac	4,266	C. E. De Butts	1	Sept. 1, 1908	2,200
Princeton	4,023	George W. Gayler	1	June —, 1908	1,500
Quincy	36,252	David B. Rawlins	1	June 30, 1908	2,200
Rockford	31,051	Peleg R. Walker	1	....do....	2,500
Rock Island	19,493	Herbert B. Hayden	1	July 31, 1908	2,400
Springfield	34,159	J. H. Collins	(a)	(a)	(a)
Spring Valley	6,214	Charles P. Hulce	1	May 31, 1908	1,400
Sterling:					
District No. 11	6,309	H. L. Chapman [b]	(a)	(a)	(a)
District No. 8 (Wallace School)		Miss A. Laurie Hill	1	June 12, 1908	1,200
Streator	14,079	M. G. Clark	1	July —, 1908	2,100
Sycamore	3,653	Hugh A. Bone	1	Sept. —, 1908	1,500
Taylorville:					
East side	4,248	Henry L. Fowkes	1	May 1, 1908	1,000
West side		E. B. Couch	1	....do....	1,000
Urbana	5,728	A. P. Johnson	1	July 31, 1908	1,800
Waukegan	9,426	Miriam A. Besley	(a)	(a)	(b)
INDIANA.					
Alexandria	7,221	Oscar Morton Pittenger	1	June —, 1908	1,700
Anderson	20,178	J. B. Pearcy [b]	(a)	(a)	(a)
Bedford	6,115	Joseph B. Fagan	1	Aug. 1, 1908	2,000
Bloomington	3,460	William Henry Sanders	3	July 31, 1909	2,000
Bluffton	4,479	Philemon A. Allen	1	July 1, 1909	1,500
Brazil	7,786	C. C. Coleman	3	June 15, 1911	2,100
Columbus	8,130	T. F. Fitzgibbon	3	July 31, 1910	2,000
Connersville	6,836	Edwin A. Turner	1	July 1, 1908	1,500
Crawfordsville	6,649	William A. Millis [d]	3	June —, 1909	2,250
Decatur	4,142	William Beachler	2	....do....	1,400
East Chicago	3,411	Edwin N. Canine	(a)	(a)	(a)
Elkhart	15,184	Ellis H. Drake	2	July 1, 1908	2,400
Evansville	59,007	Frank W. Cooley	1	Aug. —, 1908	4,000
Fort Wayne	45,115	Justin N. Study	3	July 1, 1909	3,000
Frankfort	7,100	Edwin S. Monroe	3	June 1, 1909	2,000
Franklin	4,005	Alva Otis Neal	2	Sept. 1, 1909	1,800
Garrett	3,910	Francis M. Merica	1	Aug. 1, 1908	1,350
Gas City	3,622	James H. Jeffrey	1	May 29, 1908	1,250
Goshen	7,810	Lillian E. Michael	2	—— —, 1908	1,700
Greenfield	4,489	William Chester Goble	3	—— —, 1909	1,500
Greensburg	5,034	Elmer C. Jerman	1	Sept. 1, 1908	1,500
Hammond	12,376	C. M. McDaniell [b]	(a)	(a)	(a)

[a] No data. [b] For 1906–7; no later information. [c] G. B. Coffman, 1908–9.
[d] Elected president Hanover College 1908–9; successor not known.

II.—City Superintendents, 1907–8—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per annum.
INDIANA—continued.					
Hartford City	5,912	Linnaeus N. Hines	1	May 26, 1908	$1,800
Huntington	9,491	William Patterson Hart	1	Aug. 31, 1908	2,100
Indianapolis	169,164	Calvin N. Kendall	4	July 1, 1909	5,000
Jeffersonville	10,774	C. McHenry Marble	1	Aug. 1, 1908	1,800
Kokomo	10,609	Robert A. Ogg	1	do	1,800
Lafayette	18,116	Robert F. Hight	1	June 12, 1908	2,000
Laporte	7,113	John Anderson Wood	1	Aug. 1, 1908	2,340
Lawrenceburg	4,326	Jesse W. Riddle	1	do	1,500
Lebanon	4,465	Henry Grant Brown	2	June —, 1909	1,600
Linton	3,071	Joseph H. Haseman [a]	(b)	(b)	(b)
Logansport	16,204	Albert H. Douglass	1	July 1, 1908	2,400
Madison	7,835	W. A. Jessup	2	June —, 1909	1,700
Marion	17,337	Benjamin F. Moore [c]	1	Aug. 1, 1908	2,700
Martinsville	4,038	Jeremiah E. Robinson	1	July 31, 1908	1,400
Michigan City	14,850	Louis Ward Keeler	1	Mar. 1, 1908	2,200
Mishawaka	5,560	John F. Nuner	3	Aug. 1, 1909	1,800
Montpelier	3,405	L. E. Kelley	1	June 3, 1908	1,200
Mount Vernon	5,132	Edward G. Bauman	2	June 1, 1909	1,800
Muncie	20,942	George L. Roberts [d]	1	Aug. 1, 1908	2,600
New Albany	20,628	C. A. Prosser	1	June 1, 1909	2,000
Noblesville	4,792	Edwin L. Holton [a]	(b)	(b)	(b)
Peru	8,463	Albert A. Campbell	2	July 1, 1908	1,800
Plymouth	3,656	Ray Arah Randall	3	Aug. 1, 1909	1,750
Portland	4,798	G. E. Derbyshire	1	June 30, 1908	1,500
Princeton	6,041	Harold Barnes	1	June —, 1908	1,700
Richmond	18,226	Thomas Abbott Mott	3	Aug. —, 1908	2,200
Rushville	4,541	Joseph Hiram Scholl	1	Aug. 1, 1908	1,400
Seymour	6,445	H. C. Montgomery	(b)	(b)	(b)
Shelbyville	7,169	James Harney Tomlin [e]	2	July 1, 1908	2,000
South Bend	35,999	Calvin Moon	3	Sept. 7, 1908	2,520
Terre Haute	36,673	Walter Piety Morgan [f]	1	Aug. 1, 1908	2,600
Tipton	3,764	C. F. Patterson [a]	(b)	(b)	(b)
Valparaiso	6,280	Arthur A. Hughart	3	May —, 1910	1,800
Vincennes	10,249	Robert I. Hamilton	1	June 30, 1908	2,300
Wabash	8,618	Adelaide Steele Baylor	3	June —, 1909	2,000
Warsaw	3,987	John Jacob Early [g]	1	Sept. 1, 1908	(b)
Washington	8,551	William F. Axtell	1	Aug. 1, 1908	(b)
Whiting	3,983	John Calvin Hall	1	June 30, 1908	1,920
IOWA.					
Albia	2,889	F. E. George	1	May 29, 1908	1,400
Atlantic	5,046	Charles E. Blodgett	1	Sept. —, 1908	1,600
Boone	8,880	J. C. King	1	July 1, 1908	2,000
Burlington	23,201	Francis M. Fultz	1	do	2,100
Cedar Falls	5,319	I. M. Kelley [a]	(b)	(b)	(b)
Cedar Rapids	25,656	J. J. McConnell	1	Aug. —, 1908	3,000
Centerville	5,256	E. N. Gibson	1	June —, 1908	1,600
Chariton	3,989	C. J. Johnson	1	May 15, 1908	1,400
Charles City	4,227	Charles Almet Kent	1	June —, 1908	1,750
Cherokee	3,865	L. H. Maus [a]	(b)	(b)	(b)
Clarinda	3,276	Willard E. Salisbury	1	June 1, 1908	1,500
Clinton	22,698	Ozro P. Bostwick	1	July 1, 1908	2,500
Council Bluffs	25,802	Wesley N. Clifford [h]	1	Aug. 1, 1908	2,600
Creston	7,752	Adam Pickett	1	July 1, 1908	1,500
Davenport	35,254	Frank L. Smart	1	June 30, 1908	2,500
Decorah	3,246	Henry C. Johnson	1	June 12, 1908	1,500
Des Moines	62,139	William Otis Riddell	1	June —, 1908	3,600
Dubuque	36,297	F. T. Oldt	(b)	(b)	(b)
Fairfield	4,689	S. A. Power	(b)	(b)	(b)
Fort Dodge	12,162	George H. Mullin [i]	(b)	(b)	(b)
Fort Madison	9,278	Charles W. Cruickshank [g]	1	June 1, 1908	1,500
Grinnell	3,860	Eugene Henely	1	do	1,600
Iowa City	7,987	H. E. Blackmar	1	July —, 1908	1,800
Keokuk	14,641	William Aldrich	1	July 1, 1908	1,800
Le Mars	4,146	Thomas B. Hutton	1	June 1, 1909	2,000
Marion	4,102	Grant E. Finch	1	June —, 1908	1,600
Marshalltown	11,544	Aaron Palmer	3	Jan. 1, 1910	2,000
Mason City	6,746	W. A. Brandenburg	3	Sept. 1, 1910	2,000

[a] For 1906–7; no later information.
[b] No data.
[c] J. T. Giles, 1908–9.
[d] Benjamin F. Moore, 1908–9.
[e] S. C. Ferrell, 1908–9.
[f] James Harvey Tomlin, 1908–9.
[g] Resigned; successor for 1908–9 not known.
[h] Elected assistant superintendent Philadelphia, Pa., for 1908–9; successor not known.
[i] R. B. Crone, 1908–9.

II.—City Superintendents, 1907–8—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per annum.
IOWA—continued.					
Missouri Valley	4,010	John H. Beveridge	1	June —, 1908	$1,700
Mount Pleasant	4,109	Bruce Francis[a]	1	....do....	1,500
Muscatine	14,073	William Franklin Chevalier	1	July 1, 1908	1,800
Newton	3,682	E. J. H. Beard	1	Aug. —, 1908	1,600
Oelwein	5,142	Orris W. Herr	1	June —, 1908	1,550
Oskaloosa	9,212	Frank Whittier Else	1	July 1, 1908	1,800
Ottumwa	18,197	A. W. Stuart	(b)	(b)	(b)
Perry	3,986	W. B. Thornburgh	1	June 1, 1908	1,400
Red Oak	4,355	W. F. Cramer	(b)	(b)	(b)
Sioux City	33,111	William M. Stevens	1	July —, 1908	2,300
Washington	4,255	R. B. Crone[c]	1	Sept. —, 1908	1,800
Waterloo:					
East side	12,580	Fred D. Merritt[d]	1	July 1, 1908	2,100
West side		Anson T. Hukill	1	Aug. 30, 1908	1,800
Webster City	4,613	(b)	(b)	(b)	(b)
KANSAS.					
Argentine	5,878	Hardin Price Butcher	1	July 1, 1908	1,500
Arkansas City	6,140	John Frederick Bender	1	Sept. 1, 1908	1,300
Atchison	15,722	Nathan T. Veatch	1	July 31, 1908	1,600
Chanute	4,208	James Henry Adams[e]	1	July 1, 1908	1,350
Cherryvale	3,472	A. J. Lovett	1	May 31, 1908	1,200
Coffeyville	4,953	William M. Sinclair	(b)	(b)	(b)
Concordia	3,401	A. F. Senter[f]	(b)	(b)	(b)
Emporia	8,223	Lloyd A. Lowther	1	July —, 1908	1,760
Fort Scott	10,322	David M. Bowen	(b)	(b)	2,000
Galena	10,155	Leslie T. Huffman	1	May 22, 1908	1,500
Horton	3,398	William Wright Wood	1	July 1, 1908	1,100
Hutchinson	9,379	Richard Rees Price	1	June 30, 1908	1,800
Independence	4,851	Charles Sumner Risdon	1	June 1, 1908	2,100
Iola	5,791	L. W. Mayberry	1	July 1, 1908	1,600
Junction City	4,695	William S. Heusner	1	....do....	1,700
Kansas City	51,418	M. E. Pearson	(b)	(b)	(b)
Lawrence	10,862	Frank P. Smith	1	Aug. 1, 1908	1,900
Leavenworth	20,735	George W. Kendrick	1	....do....	2,400
Newton	6,208	David F. Shirk[g]	1	July 1, 1908	1,500
Osawatomie	4,191	Floyd B. Lee	1	June —, 1908	1,000
Ottawa	6,934	Arch L. Bell	1	July 1, 1908	1,500
Parsons	7,682	J. A. Higdon	1	Aug. —, 1908	1,500
Pittsburg	10,112	A. H. Bushey[f]	(b)	(b)	(b)
Rosedale	3,270	George E. Rose	1	May 18, 1908	1,400
Salina	6,074	John Lofty	1	July 1, 1908	1,500
Topeka	33,608	Luther Denny Whittemore	1	Aug. 1, 1908	2,500
Wellington	4,245	W. M. Massey	(b)	(b)	(b)
Wichita	24,671	Robert Franklin Knight	1	Sept. 1, 1908	2,500
Winfield	5,554	John W. Spindler	1	July 1, 1908	1,500
KENTUCKY.					
Ashland	6,800	W. C. Campbell	1½	Sept. —, 1909	1,800
Bellevue	6,332	Harvey L. Eby	1	June 30, 1908	1,500
Bowling Green	8,226	Thomas Crittenden Cherry	2	June —, 1908	1,800
Covington	42,938	Homer O. Sluss	2	Aug. 1, 1909	2,400
Danville	4,285	John W. Rawlings[f]	(b)	(b)	(b)
Dayton	6,104	James McGinnis	1	July 1, 1908	1,500
Frankfort	9,487	Hugh C. McKee	1	June 13, 1908	1,800
Georgetown	3,823	R. L. Garrison	(b)	(b)	(b)
Henderson	10,272	Livingstone McCartney	2	June 30, 1908	2,000
Hopkinsville	7,280	Barksdale Hamlett	1	....do....	1,800
Lexington	26,369	Massillon Alexander Cassidy	4	June —, 1911	2,400
Louisville	204,731	Edgar H. Mark	2	Sept. 1, 1909	5,000
Madisonville	3,628	Ralph B. Rubins	1	May 16, 1908	1,200
Maysville	6,423	D. S. Clinger[e]	(b)	(b)	(b)
Middlesboro	4,163	M. Oliver Winfrey	1	June 30, 1908	1,500
Newport	28,301	Ellsworth Regenstein	(h)	(h)	2,160
Owensboro	13,189	McHenry Rhoads	4	—— —, 1910	2,400
Paducah	19,446	John A. Carnagey	1	Aug. 1, 1908	2,000
Paris	4,603	George W. Chapman	3	Sept. 1, 1910	1,550
Richmond	4,653	T. J. Coates	(b)	(b)	(b)
Somerset	3,384	J. P. W. Brouse	1	July 1, 1908	1,950
Winchester	5,964	R. M. Shiff[f]	(b)	(b)	(b)

[a] Charles W. Cruikshank, 1908–9.
[b] No data.
[c] Bruce Francis, 1908–9.
[d] Addison W. Chamberlin, 1908–9.
[e] Resigned; successor for 1908–9 not known.
[f] For 1906–7; no later information.
[g] L. J. Hall, 1908–9.
[h] Indefinite.

II.—City Superintendents, 1907–8—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per annum.
LOUISIANA.					
Alexandria	5,648	H. H. Harper[a c]	(b)	(b)	(b)
Baton Rouge	11,269	Stephen S. Thomas	(b)	(b)	(b)
Crowley	4,214	James Gibson Chapman	1	June 4,1908	$1,200
Donaldsonville	4,105	David B. Showalter	4	Nov. 15,1908	1,800
Houma	5,428	William P. Tucker	4	Nov. —,1908	1,100
Lake Charles	6,680	D. F. Dudley[a]	(b)	(b)	(b)
Monroe	5,428	George W. Reid	1	May 29,1908	2,000
New Iberia	6,815	J. C. Ellis	(b)	(b)	(b)
New Orleans	287,104	Warren Easton	4	June —,1908	4,000
Shreveport	16,013	C. E. Byrd	1	Oct. 23,1908	3,000
MAINE.					
Auburn	12,951	Henry H. Randall	1	July 1,1908	1,700
Augusta	11,683	Daniel Wolford La Rue	1	Aug. 1,1908	2,000
Bangor	21,850	Charles Edward Tilton	1	June —,1908	1,800
Bath	10,477	Frederick W. Freeman	1	June 30,1908	1,600
Belfast	4,615	Alonzo J. Knowlton	1	Aug. 1,1908	1,000
Biddeford	16,145	Royal E. Gould	5	—— —,1910	1,750
Brewer	4,835	Charles Norman Perkins	1	July 1,1908	1,500
Brunswick	5,210	Charles M. Pennell	(b)	(b)	1,400
Calais	7,655	Ashley St. Claire	1	Apr. —,1908	300
Eastport	5,311	John Wheeler Foster	1	July 1,1908	1,200
Ellsworth	4,297	John F. Royal	(b)	(b)	(b)
Gardiner	5,501	Charles O. Turner	3	July 1,1910	1,300
Houlton	4,686	Fred L. Putnam	1	—— —,1908	300
Lewiston	23,761	Arthur J. Collins	1	July 31,1908	1,800
Oldtown	5,763	D. Lyman Wormwood	1	Apr. —,1908	1,750
Portland	50,145	W. H. Brownson	1	Dec. —,1908	2,250
Rockland	8,150	L. E. Moulton	1	July 1,1908	1,500
Saco	6,122	Joseph H Hefflon	1	.....do.....	1,000
Sanford	6,078	Henry Jewett Hall	1	Mar. 11,1908	1,000
Skowhegan	4,266	David Wilder Colby	1	June 30,1908	1,000
South Portland	6,287	James Otis Kaler	1	Mar. —,1908	1,000
Waterville	9,477	Dennis E. Bowman	1	July —,1908	1,650
Westbrook	7,283	Fred Benson	1	Jan. —,1909	1,000
MARYLAND.					
Annapolis	8,402	Harry R. Wallis[a d]	(b)	(b)	(b)
Baltimore	508,957	James H. Van Sickle	(e)	(e)	5,000
Cambridge	5,747	William P. Beckwith[d]	2	Aug. 7,1908	1,200
Cumberland	17,128	Archibald C. Willison[d]	1	July 31,1908	1,800
Frederick	9,296	Oscar B. Coblentz[d]	2	Aug. 1,1908	1,500
Hagerstown	13,591	John P. Fockler[d]	2	.....do.....	1,350
Salisbury	4,277	H. Crawford Bounds[d]	2	Aug. 1,1908	1,400
MASSACHUSETTS.					
Abington[f]	4,489	C. A. Record	1	July 31,1908	2,200
Adams	11,134	Francis A. Bagnall	1	Sept. —,1908	2,400
Amesbury[g]	9,473	Charles E. Fish	(b)	(b)	(b)
Amherst	5,028	Audubon Levi Hardy	1	Sept. —,1908	1,800
Andover	6,813	Corwin F. Palmer[h]	1	.....do.....	1,900
Arlington	8,603	John F. Scully	(b)	(b)	(b)
Athol	7,061	Winfield Scott Ward	1	Sept. —,1908	2,000
Attleboro	11,335	Lewis A. Fales	1	Aug. 15,1908	2,000
Barnstable	4,364	George Homer Galger	1	Aug. 1,1908	1,500
Belmont[i]	3,929	George P. Armstrong	1	.....do.....	[j] 1,500
Beverly	13,884	Adelbert L. Safford	1	Sept. —,1908	2,200
Blackstone	5,721	Ambrose Kennedy	1	Mar. 15,1908	900
Boston	560,892	Stratton D. Brooks	6	Sept. 1,1912	6,000
Braintree[k]	5,981	John Clinton Anthony	1	June —,1908	1,800
Bridgewater[f]	5,806	C. A. Record	1	July 31,1908	2,200
Brockton	40,063	Don C. Bliss	1	Sept. —,1908	2,800
Brookline	19,935	George I. Aldrich	1	Aug. 2,1908	4,000
Cambridge	91,886	William Clinton Bates	1	Sept. 1,1908	3,500
Canton	4,584	James S. Perkins	1	Mar. 6,1908	1,800
Chelmsford	3,984	Frederick Lincoln Kendall	1	July 31,1908	1,500
Chelsea	34,072	Benjamin Carlisle Gregory	(e)	(e)	2,800
Chicopee	19,167	John C. Gray	1	July 1,1908	2,000

[a] For 1906–7, no later information.
[b] No data
[c] Principal of high school.
[d] County superintendent.
[e] Indefinite.
[f] Abington and Bridgewater have the same superintendent.
[g] Amesbury and Manchester have the same superintendent.
[h] Elected superintendent at St. Johnsbury, Vt., for 1908–9; successor not known.
[i] Belmont and Lexington have the same superintendent.
[j] For 3 days per week; receives also $900 for services at Lexington.
[k] For 1908–9 united with Brookfield and Randolph to form supervision district.

II.—City Superintendents, 1907–8—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per annum.
MASSACHUSETTS—con.					
Clinton	13,667	Charles L. Hunt	1	June —, 1908	$2,000
Concord	5,652	Wells Albert Hall	1	Sept. 1, 1908	500
Danvers	8,542	Henry C. Sanborn	1	July 1, 1908	1,600
Dartmouth	3,669	Albert S. Cole	(a)	(a)	(a)
Dedham	7,457	Roderick W. Hine	1	July 1, 1908	(a)
Easthampton	5,603	W. D. Miller	1	do	1,700
Easton	4,837	Frederic S. Pope	1	Aug. 31, 1908	1,700
Everett	24,336	Ulysses G. Wheeler	(b)	(b)	2,500
Fairhaven	3,567	Frank M. Marsh	(a)	(a)	(b)
Fall River	104,863	Everett Brownell Durfee	1	Aug. 31, 1908	3,000
Fitchburg	31,531	Joseph G. Edgerly	1	July 31, 1908	2,700
Framingham	11,302	Samuel F. Blodgett	1	Sept. 1, 1908	2,000
Franklin	5,017	Irving H. Gamwell	1	June 30, 1908	1,000
Gardner	10,813	Judson I. Wood	1	June —, 1908	2,100
Gloucester	26,121	Freeman Putney	1	July —, 1907	2,300
Grafton	4,869	Robert Orange Small	1	Apr. —, 1908	1,925
Great Barrington	5,854	J. Francis Allison	1	Aug. 27, 1908	1,700
Greenfield	7,927	Herbert Eliot Richardson	1	July 1, 1908	2,000
Haverhill	37,175	George Edwin Gay	1	Sept. 1, 1908	c 2,400
Hingham	5,059	Nelson G. Howard	1	Mar. —, 1908	2,350
Holyoke	45,712	J. J. O'Donnell	(a)	(a)	(a)
Hudson	5,454	C. S. Lyman	1	Sept. —, 1908	d 1,950
Hyde Park	13,244	Horace L. Brittain	1	do	2,200
Ipswich	4,658	Robert M. Martin	1	Aug. 31, 1908	720
Lawrence	62,559	Bernard M. Sheridan	1	Jan. 1, 1909	3,500
Lee	3,596	Preston Barr	1	July 1, 1908	1,500
Leominster	12,392	Thomas E. Thompson e	(a)	(a)	(a)
Lexington f	3,831	George P. Armstrong	1	Aug. 31, 1908	900
Lowell	94,969	Arthur K. Whitcomb	1	Sept. —, 1908	3,000
Lynn	68,513	Frank J. Peaslee	1	do	3,000
Malden	33,664	Henry Dwight Hersey	1	July 1, 1908	2,700
Manchester g	2,522	Charles E. Fish	(a)	(a)	(a)
Mansfield h	4,006	Edward P. Fitts	1	Apr. —, 1908	1,800
Marblehead	7,582	Almorin Orton Caswell	1	Aug. 1, 1908	1,500
Marlboro	13,609	Orion A. Morton	1	June —, 1908	2,000
Maynard	3,142	John Clarence Mackin	1	Sept. 1, 1908	1,500
Medford	18,244	Charles H. Morss	1	June 30, 1908	2,800
Melrose	12,962	Fred Herbert Nickerson	1	Aug. —, 1908	2,450
Merrimac		George E. Chickering e	(a)	(a)	(a)
Methuen	7,512	Charles Albert Breck	1	Sept. 1, 1908	1,300
Middleboro	6,885	Charles H. Bates e	(a)	(a)	(a)
Milford	11,376	Charles W. Haley	1	Mar. —, 1909	1,800
Millbury	4,460	Ira T. Chapman	1	Aug. 1, 1908	1,600
Milton	6,578	Asher Johnson Jacoby	1	Sept. 1, 1908	2,500
Monson	3,402	Frederic A. Wheeler	1	July 1, 1908	1,500
Montague	6,150	Frank P. Davison	1	do	1,800
Natick	9,488	Albert L. Barbour	(a)	(a)	(a)
Needham	4,016	Walter Knight Putney	3	Jan. 1, 1910	1,000
New Bedford	62,442	William Edwin Hatch i	1	June 1, 1908	4,000
Newburyport	14,478	Edgar Lincoln Willard	j 2	Sept. 1, 1908	1,600
Newton	33,587	Frank E. Spaulding	1	do	5,000
North Adams	24,200	Isaac Freeman Hall	1	do	2,500
Northampton	18,643	Fayette K. Congdon	1	Aug. 1, 1908	2,000
North Andover	4,243	Wallace Edward Mason	1	Sept. 1, 1908	2,100
North Attleboro	7,253	Robert Jaquith Fuller	1	Sept. —, 1908	1,800
Northbridge	7,036	S. A. Melcher	1	Apr. —, 1908	2,350
North Brookfield	4,587	B. J. Merriam	(a)	(a)	(a)
Norwood	5,480	William C. Hobbs	1	Sept. 1, 1908	2,000
Orange	5,520	Edward Dixon	1	July 1, 1908	1,700
Palmer	7,801	Lee T. Gray	(a)	(a)	(a)
Peabody	11,523	Albert Robinson	1	June —, 1908	1,800
Pittsfield	21,766	Charles A. Byram	1	Sept. 1, 1908	2,300
Plymouth	9,592	Francis J. Heavens	1	do	2,000
Provincetown	4,247	Alvan R. Lewis e	(a)	(a)	(a)
Quincy	23,899	Frank Edson Parlin	1	Dec. 31, 1908	2,700
Randolph k	3,993	Watson Clark Lea	1	July 1, 1908	1,500
Reading	4,969	Melville A. Stone	1	Sept. 1, 1908	1,700
Revere	10,395	William Henry Winslow l	1	July 1, 1908	2,200
Rockland	5,327	William L. Coggins	1	Sept. 1, 1908	1,000
Rockport	4,592	William Francis Eldredge	1	July 1, 1908	1,200
Salem	35,956	John W. Perkins	1	June 30, 1908	2,500

a No data. b Indefinite.
c Maximum, $2,800.
d For services also at Lincoln.
e For 1906–7; no later information.
f Belmont and Lexington have the same superintendent.
g Amesbury and Manchester have the same superintendent.
h Mansfield and Stoughton have the same superintendent.
i Allen P. Keith, 1908–9.
j Permanent tenure after two years.
k For 1908–9 united with Braintree and Brookfield to form supervision district.
l Clarence H. Dempsey, 1908–9.

II.—City Superintendents, 1907–8—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per annum.
MASSACHUSETTS—con.					
Saugus [a]	5,084	Charles Edwin Stevens [b]	1	June 30, 1908	$2,200
Somerville	61,643	Gordon A. Southworth [c]	1	Apr. 30, 1908	3,000
Southbridge	10,025	F. E. Corbin	1	Aug. —, 1908	2,000
South Hadley	4,526	Frederick E. Whittemore	1	Apr. —, 1908	1,750
Spencer	7,627	Charles F. Adams	1	Aug. —, 1908	1,600
Springfield	62,059	Wilbur Fisk Gordy	1	Apr. 1, 1908	4,000
Stoneham [a]	6,197	Charles Edwin Stevens	1	June 30, 1908	2,200
Stoughton [d]	5,442	Edward P. Fitts	1	Apr. 9, 1908	1,800
Swampscott	4,548	William J. Peto	2	July 1, 1908	1,000
Taunton	31,036	Henry W. Harrub	1	Aug. 31, 1908	2,400
Tewksbury	3,683	Seth Howard Chace	1	Apr. —, 1908	2,000
Wakefield	9,290	Jacob H. Carfrey	1	May 1, 1908	2,000
Waltham	23,481	William D. Parkinson	(e)	(e)	2,350
Ware	8,263	George Wilbert Cox	1	Aug. 31, 1908	2,000
Warren	4,417	Parker T. Pearson	1	Aug. 1, 1908	1,600
Watertown	9,706	Wilfred H. Price	1	Sept. 1, 1908	1,800
Webster	8,804	Ernest William Robinson	1	Aug. 1, 1908	1,400
Wellesley	5,072	Marshall Livingston Perrin	1	—— —, 1908	1,500
Westboro	5,400	Harry C. Waldron	1	Aug. —, 1908	1,800
Westfield	12,310	Charles L. Simmons	1	Sept. 1, 1908	2,400
West Springfield	7,105	Clarence E. Brockway	1	July 1, 1908	1,800
Weymouth	11,324	Abner A. Badger	1	.....do.....	2,000
Whitman	6,155	Henry M. Walradt	1	June 30, 1908	f 1,000
Williamstown	5,013	Walter G. Mitchell	1	Apr. —, 1908	1,200
Winchendon	5,001	Wilbur B. Sprague	1	May 1, 1908	2,000
Winchester	7,248	Schuyler F. Herron	1	July 31, 1908	2,300
Winthrop	6,058	Frank A. Douglas	1	Sept. —, 1908	2,200
Woburn	14,254	George L. Clapp	3	Sept. 1, 1908	2,000
Worcester	118,421	Homer Pierce Lewis	3	June 1, 1909	4,000
MICHIGAN.					
Adrian	4,519	Charles W. Mickens	2	June —, 1908	2,000
Albion	9,654	W. J. McKone	1	Sept. 1, 1908	1,700
Alpena	11,802	George A. Hunt	(g)	(g)	(g)
Ann Arbor	14,509	Herbert M. Slauson	1	Sept. 1, 1908	2,500
Battle Creek	18,563	William G. Coburn	1	July 15, 1908	2,400
Bay City	40,747	John A. Stewart	1	July 31, 1908	3,000
Benton Harbor	6,562	William Robins Wright	1	May 29, 1908	1,800
Bessemer	3,911	Matthew J. Walsh	1	June 19, 1908	1,500
Big Rapids	4,686	Arthur S. Hudson	1	July —, 1908	1,500
Cadillac	5,997	George A. McGee	1	.....do.....	2,000
Calumet	40,704	Henry Elton Kratz	2	.....do.....	3,500
Charlotte	4,092	Charles Howard Carrick	1	June 19, 1908	1,650
Cheboygan	6,489	Allen F. Wood	1	.....do.....	1,350
Coldwater	6,212	Edward M. McElroy	1	June —, 1908	1,600
Detroit	285,704	Wales C. Martindale	3	July —, 1909	6,000
Dowagiac	4,151	Warren E. Conkling	1	June —, 1908	1,600
Escanaba	9,549	F. Dayton Davis	3	Sept. 1, 1908	2,500
Flint	13,103	Alvin Nelson Cody	2	July 1, 1908	2,000
Gladstone	3,380	E. J. Willman [h]	(g)	(g)	(g)
Grand Haven	4,743	Lawrence H. Van den Berg	1	June 24, 1908	1,400
Grand Rapids	87,565	William Albert Greeson	1	July 1, 1908	3,500
Hancock	4,050	Eugene La Rowe	1	June —, 1900	1,900
Hillsdale	4,151	S. J. Gier	3	—— —, 1910	1,500
Holland	7,790	Willis T. Bishop	2	July —, 1909	1,800
Houghton	3,359	John A. Doelle	1	June —, 1908	2,000
Ionia	5,209	Hiram C. Daley	1	Sept. —, 1908	1,400
Iron Mountain	9,242	Lee E. Amidon	1	June 30, 1908	2,500
Ironwood	9,705	John V. Brennan	1	.....do.....	2,200
Ishpeming	13,255	E. E. Scribner	1	June —, 1908	3,000
Jackson	25,180	Le Roy S. Norton	1	June 19, 1908	2,500
Kalamazoo	24,404	Shattuck O. Hartwell	1	July 1, 1908	2,800
Lansing	16,485	Edward P. Cummings	1	June —, 1908	2,000
Ludington	7,166	Guy D. Smith [i]	1	July 13, 1908	1,800
Manistee	14,260	Samuel W. Baker	1	June 30, 1908	2,000
Manistique	4,126	W. E. Hanson	1	July 1, 1908	1,800
Marine City	3,829	Leland W. Carr	1	June 30, 1908	1,250
Marquette	10,058	Kendall P. Brooks [j]	1	July 1, 1908	2,250
Marshall	4,370	Ralph Stillman Garwood	1	June —, 1908	1,600
Menominee	12,818	Richmond Henry Kirtland [k]	1	July —, 1908	2,400
Monroe	5,043	F. J. S. Tooze	2	Sept. 3, 1909	1,800
Mount Clemens	6,576	John P. Everett	1	June 26, 1908	1,700
Mount Pleasant	3,362	Charles Erna White	1	June 15, 1908	1,250
Muskegon	20,818	Joseph M. Frost	1	July —, 1908	2,800
Negaunee	6,935	Orr Schurtz	1	Sept. 7, 1908	1,900
Niles	4,287	John D. Schiller	1	June —, 1908	1,600

[a] Saugus and Stoneham have the same superintendent.
[b] Fairfield Whitney, 1908–9.
[c] Charles S. Clark, 1908–9.
[d] Mansfield and Stoughton have the same superintendent.
[e] Indefinite.
[f] For 2½ days per week.
[g] No data.
[h] For 1906–7; no later information.
[i] F. E. Millar, 1908–9.
[j] Gustave Wm. Gehrand, 1908–9.
[k] E. J. Shives, 1908–9.

II.—City Superintendents, 1907–8—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per annum.
MICHIGAN—continued.					
Norway	4,170	Charles Edward Cullen	1	July 1,1908	$1,800
Owosso	8,696	James W. Simmons	1	Sept. 3,1908	1,800
Petoskey	5,285	Howard Martin Elliott	1	June 19,1908	1,500
Pontiac	9,769	F. P. Buck [a]	(b)	(b)	(b)
Port Huron	19,158	Walter F. Lewis	1	July 1,1908	2,050
Saginaw:					
East side	42,345	Eugene Clarence Warriner	1	June 30,1908	2,600
West side		Philipp Huber	1	July 1,1908	2,100
St. Joseph	5,155	Ernest P. Clarke	1	June 1,1908	1,800
Sault Ste. Marie	10,538	Edgar E. Ferguson	1	June 30,1908	2,500
South Haven	4,009	Arthur Douglas Prentice	1	Sept. —,1908	1,400
Three Rivers	3,550	Leon Lewis Tyler	1	June 12,1908	1,400
Traverse City	9,407	Isaac B. Gilbert	2	June —,1909	2,100
Wyandotte	5,183	F. H. Sooy [a]	(b)	(b)	(b)
Ypsilanti	7,378	William Benton Arbaugh	3	July 1,1910	2,000
MINNESOTA.					
Albert Lea	4,500	Eugene M. Phillips	1	July 1,1908	2,000
Anoka	3,769	Frederick J. Sperry	1	June 1,1908	1,500
Austin	5,474	George A. Franklin	1	June —,1908	2,100
Brainerd	7,524	T. B. Hartley	(b)	(b)	(b)
Crookston	5,359	Ezra Elmer McIntire	3	June —,1910	2,000
Duluth	52,969	Robert E. Denfeld	3	Aug. 1,1911	4,000
Ely	3,717	Charles L. Newberry	1	June 15,1908	2,000
Eveleth	2,752	Burton O. Greening	1	Sept. 1,1908	2,500
Faribault	7,868	Virgil Laurens Jones	1	June —,1908	1,700
Fergus Falls	6,072	Ray B. MacLean	1	June 10,1908	1,500
Hastings	3,811	Edgar L. Porter [a]	(b)	(b)	(b)
Little Falls	5,774	Harry E. White	1	June 1,1908	1,800
Mankato	10,599	James M. McConnell	1	....do....	1,900
Minneapolis	202,718	Charles Morison Jordan	3	July 1,1910	5,250
Moorhead	3,730	Freeman E. Lurton	1	June —,1908	1,700
New Ulm	5,403	Ernest T. Critchett	2	July 31,1909	1,800
Owatonna	5,561	P. J. Kuntz	3	June 1,1908	1,800
Red Wing	7,525	John L. Silvernale	1	....do....	1,700
Rochester	6,843	Lester S. Overholt	1	Sept. —,1908	1,900
St. Cloud	8,663	August N. Farmer	1	June 1,1908	2,150
St. Paul	163,065	S. L. Heeter	2	June —,1908	4,000
St. Peter	4,302	P. P. Kennedy	1	June 1,1908	1,500
Stillwater	12,318	Darius Steward	1	July 31,1908	2,100
Virginia	2,962	Lafayette Bliss	(b)	—— —,1909	2,600
Willmar	3,409	P. C. Tonning	1	Sept. 1,1908	1,600
Winona	19,714	Charles R. Frazier	1	July 31,1908	2,300
MISSISSIPPI.					
Biloxi	5,467	Jackson M. Young	1	May 29,1908	1,500
Columbus	6,484	Joe Cook	3	June —,1908	2,000
Corinth	3,661	William Peyton Dobbins	1	May 27,1908	1,500
Greenville	7,642	E. E. Bass	(c)	(c)	2,000
Hattiesburg	4,175	Friley B. Woodley	2	Sept. 1,1908	2,000
Jackson	7,816	Robert Torrey	1	....do....	2,000
Laurel	3,193	Richard Henry Watkins	1	....do....	1,800
McComb	4,477	Lowrey R. Powell	1	May 29,1908	1,800
Meridian	14,050	John Clayton Fant	3	Apr. —,1910	2,250
Natchez	12,210	J. H. Owings	(b)	(b)	(b)
Vicksburg	14,834	J. P. Carr	1	Sept. —,1908	2,000
Water Valley	3,813	Nathaniel E. Traywick	3	May 29,1908	1,800
Yazoo City	4,944	M. Rose	1	June 1,1908	2,000
MISSOURI.					
Aurora	6,191	Millard F. Butler	1	May 22,1908	1,000
Boonville	4,377	M. A. O'Rear	1	May 21,1908	1,500
Brookfield	5,484	J. W. White	1	Sept. —,1908	1,400
Cape Girardeau	4,815	A. W. Lawson [a]	(b)	(b)	(b)
Carterville	4,445	O. N. Waltz [a]	(b)	(b)	(b)
Carthage	9,416	Joseph Martin White	1	June 30,1908	2,500
Chillicothe	6,905	Frank L. Wiley	1	....do....	1,200
Clinton	5,061	Arthur Lee	1	June 1,1908	1,450
Columbia	5,651	William Henry Hays	1	Aug. 1,1908	1,500
De Soto	5,611	W. C. Ogier	1	July 1,1908	1,320
Fulton	4,883	J. C. Humphreys	(b)	(b)	(b)
Hannibal	12,780	(b)	(b)	(b)	(b)
Independence	6,974	William L. C. Palmer	1	May 29,1908	1,720
Jefferson City	9,664	R. B. D. Simonson	1	May 22,1908	1,500
Joplin	26,023	Edmund J. Vert [d]	2	July 31,1908	2,500
Kansas City	163,752	James Mickleborough Greenwood	1	July 1,1908	4,500
Kirksville	5,966	W. J. Banning [a]	(b)	(b)	(b)
Lexington	4,190	Melvin J. Patterson	1	May 31,1908	1,500

[a] For 1906–7; no later information.
[b] No data.
[c] Indefinite.
[d] George Victor Buchanan, 1908–9.

II.—City Superintendents, 1907–8—Continued.

City.	Population. (Census) of 1900.	Superintendent.	Term of office in years.	Expiration of present term.	Salary per annum.
MISSOURI—continued.					
Louisiana	5,131	Elizabeth Whitaker	1	May 22,1908	$1,300
Macon	4,068	William A. Annin[a]	1	June 30,1908	1,200
Marshall	5,086	Henry H. Edmiston	(b)	(b)	(b)
Maryville	4,577	Charles A. Hawkins	1	May 22,1908	1,500
Mexico	5,099	Lee B. Hawthorne	1	June —,1908	1,500
Moberly	8,012	J. C. Lilly[c]	(b)	(b)	(b)
Nevada	7,461	J. W. Storms	(b)	(b)	(b)
Poplar Bluff	4,321	W. L. Barrett[c]	(b)	(b)	(b)
Rich Hill	4,053	L. F. Robinson[c]	(b)	(b)	(b)
St. Charles	7,982	Joseph Herring[c]	(b)	(b)	(b)
St. Joseph	102,979	John A. Whiteford	2	July 1,1908	3,000
St. Louis	575,238	F. Louis Soldan[d]	4	May 8,1909	7,000
Sedalia	15,231	George Victor Buchanan[e]	1	Sept. 1,1908	2,200
Springfield	23,267	Jonathan Fairbanks	1	June 30,1908	2,250
Trenton	5,396	C. A. Greene	(b)	(b)	(b)
Warrensburg	4,724	W. E. Morrow	1	July 1,1908	1,200
Webb City	9,201	R. S. Nichols[c]	(b)	(b)	(b)
MONTANA.					
Anaconda	9,453	William Kilian Dwyer	1	July 31,1908	2,700
Bozeman	3,419	Risdon J. Cunningham	1	Aug. 31,1908	2,000
Butte	30,470	Robert G. Young	1	Sept. 30,1908	4,000
Great Falls	14,930	Samuel D. Largent	1	Sept. 1,1908	2,750
Helena	10,770	Randall J. Condon	1	Aug. —,1908	3,600
Missoula	4,366	J. Ulysses Williams	1	Apr. 1,1908	1,800
NEBRASKA.					
Beatrice	7,875	Clark A. Fulmer[f]	3	Aug. 1,1910	2,000
Fremont	7,241	A. H. Waterhouse	(b)	(b)	(b)
Grand Island	7,554	Robert J. Barr	3	July —,1909	2,000
Hastings	7,188	John D. French[g]	1	May 29,1908	1,900
Kearney	5,634	George Burgert	1	June —,1908	1,560
Lincoln	40,169	William Logan Stephens	3	Aug. —,1909	2,700
Nebraska City	7,380	Neil Sinclair	1	June 5,1908	1,600
Norfolk	3,883	Edwin J. Bodwell[g]	3	June 1,1910	1,650
North Platte	3,640	Paul Goss	2	—— —,1908	1,400
Omaha	102,555	W. M. Davidson	(b)	(b)	(b)
Plattsmouth	4,964	John W. Gamble	1	July 1,1908	1,500
South Omaha	26,001	N. M. Graham	3	July —,1910	2,500
York	5,132	Walter Wells Stoner	3	July —,1908	1,500
NEVADA.					
Reno	4,500	W. E. Pruett	1	Sept. 1,1908	2,500
NEW HAMPSHIRE.					
Berlin	8,886	George H. Whitcher	1	July 1,1908	1,800
Claremont	6,498	William H. Cummings	1	Aug. 1,1908	1,950
Concord:					
Union district	19,623	Louis John Rundlett	1	July 1,1908	2,000
Penacook district[h]		William H. Slayton	1	Sept. —,1908	[i] 1,450
Dover	13,207	Austin H. Keyes	1	Feb. —,1908	2,000
Exeter	4,922	(b)	(b)	(b)	(b)
Franklin[h]	5,946	William H. Slayton[j]	1	Sept. —,1908	[i] 1,450
Keene (Union district)	9,165	George A. Keith	1	July 1,1908	1,300
Laconia	8,042	Joseph H. Blaisdell	1	.....do.....	1,300
Manchester	56,987	Charles W. Bickford	2	.....do.....	2,300
Nashua	23,898	James H. Fassett	1	Jan. 1,1909	2,000
Portsmouth	10,537	Ernest Leroy Silver	1	July —,1908	1,850
Rochester	8,466	Andrew Jackson	1	.....do.....	1,000
Somersworth	7,032	Chauncey C. Ferguson	1	July 15,1908	1,500
NEW JERSEY.					
Asbury Park	4,148	Fred Strong Shepherd	1	Sept. —,1908	3,000
Atlantic City	27,838	Charles B. Boyer	3	July 1,1910	3,000
Bayonne	32,722	James H. Christie	3	Sept. —,1910	3,000
Bloomfield	9,668	George Morris	3	—— —,1909	3,200
Boonton	3,901	Milo P. Reagle	1	June 30,1908	1,550
Bordentown	4,110	William Macfarland	3	June 30,1909	1,500
Bridgeton	13,913	Edgar J. Hitchner	1	June —,1908	1,200
Burlington	7,392	Wilbur Watts[c]	(b)	(b)	(b)
Camden	75,935	James E. Bryan	3	Jan. 1,1911	3,500

[a] S. E. Seaton, 1908–9.
[b] No data.
[c] For 1906–7; no later information.
[d] Died March 27, 1908.
[e] John P. Gass, 1908–9.
[f] Edwin J. Bodwell, 1908–9.
[g] Resigned; successor for 1908–9 not known.
[h] Penacook district, Concord, and Franklin have the same superintendent.
[i] Total salary from district comprising Franklin, Penacook district of Concord, and Boscawen.
[j] For 1908–9 a new district comprising Franklin, Northfield, and Tilton was formed, electing Ernest Caleb superintendent.

II.—City Superintendents, 1907–8—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per annum.
NEW JERSEY—con.					
Dover	5,938	J. Howard Hulsart	1	June 30, 1908	$2,000
East Orange	21,506	Vernon L. Davey	5	July —, 1908	4,000
Elizabeth	52,130	Richard Ernest Clement	7	July 1, 1914	2,700
Englewood	6,253	Elmer C. Sherman	3	July 1, 1908	3,000
Garfield	3,504	William H. Steegar	1	June —, 1908	1,450
Gloucester City	6,840	William C. Sullivan [a]	(b)	(b)	(b)
Hackensack	9,443	Isaac A. Demarest [c]	(b)	(b)	(b)
Harrison	10,596	John Dwyer	2	Mar. 30, 1910	2,100
Hoboken	59,364	Abraham Jay Demarest	(d)	(d)	3,000
Irvington	5,255	Frank H. Morrell	1	July —, 1908	2,000
Jersey City	206,433	Henry Snyder	(d)	(d)	6,000
Kearney (P. O., Arlington.)	10,896	Herman Dressel, jr	1	July 1, 1908	2,500
Lambertville	4,637	Louis E. Boutwell	1	June 30, 1908	1,500
Long Branch	8,872	Christopher Gregory	(d)	(d)	3,300
Madison	3,754	Marcellus Oakey	(b)	(b)	(b)
Millville	10,583	Harry F. Stauffer	1	June 21, 1908	1,700
Montclair	13,962	Randall Spaulding	(d)	(d)	4,000
Morristown	11,267	W. L. R. Haven	1	July 1, 1908	3,750
Newark	246,070	Addison B. Poland	(b)	(b)	(b)
New Brunswick	20,006	William Clinton Armstrong	1	June 30, 1908	2,500
Newton	4,376	Charles J. Majory	1	June —, 1908	1,500
North Plainfield	5,009	Henry C. Krebs	1	June 30, 1908	1,800
Orange	24,141	James G. Riggs	1	June —, 1908	3,500
Passaic	27,777	O. I. Woodley [a]	(b)	(b)	(b)
Paterson	105,171	John R. Wilson	(d)	(d)	3,600
Perth Amboy	17,699	S. E. Shull	(b)	(b)	(b)
Phillipsburg	10,052	Lewis Osmon Beers	2	Apr. —, 1908	1,620
Plainfield	15,369	Henry M. Maxson	(d)	(d)	4,000
Princeton	3,899	Mabel T. Vanderbilt, principal	(b)	(b)	(b)
Rahway	15,369	William James Bickett	3	July —, 1910	2,400
Red Bank	5,428	Stephen V. Arrowsmith	1	June 20, 1908	2,450
Ridgewood	2,685	William T. Whitney [a]	(b)	(b)	(b)
Rutherford	4,411	Stephen Bedle Gilhuly	1	June 30, 1908	2,200
Salem	5,811	Morris H. Stratton [a]	(b)	(b)	(b)
Somerville	4,843	William A. Ackerman	1	June —, 1908	2,000
South Amboy	6,349	Russel M. Fitch	1	....do	1,320
South Orange	4,608	H. W. Foster	3	June 30, 1909	3,000
Summit	5,302	Miss Louise Connolly	1	June 30, 1908	2,400
Town of Union	15,187	Otto Ortel	(d)	(d)	2,800
Trenton	73,307	Ebenezer Mackey	(d)	(d)	3,400
Vineland	4,370	J. J. Unger	1	July 1, 1907	1,650
Westfield	4,328	J. J. Savitz [a]	(b)	(b)	(b)
West Hoboken	23,094	Elleott J. Tomlinson	(b)	(b)	(b)
West New York	5,267	Jared Barhite	(b)	(b)	(b)
West Orange	6,889	Alton Harvey Sherman	1	June —, 1908	3,000
Woodbury	4,087	Henry C. Dixon	3	June —, 1910	1,800
NEW MEXICO.					
Albuquerque	6,238	Wellington D. Sterling	1	July 1, 1908	2,200
Raton	.....	A. D. Hoenshel [e]	(b)	(b)	(b)
Santa Fe	.....	James A. Wood	1	July 1, 1908	1,200
NEW YORK.					
Albany	94,151	Charles W. Cole	(d)	(d)	3,000
Albion	4,477	Willis G. Carmer	1	Aug. 1, 1908	1,800
Amsterdam	20,929	Harrison T. Morrow	(d)	(d)	(d)
Auburn	30,345	Alfred C. Thompson	1	Aug. 1, 1908	3,000
Ballston Spa	3,923	A. A. Lavery	1	July —, 1908	1,400
Batavia	9,180	John Kennedy	1	July 1, 1908	2,000
Bath	4,994	Floyd M. Fernalld	2	June —, 1909	1,350
Binghamton	39,647	Joseph Edward Banta	(d)	(d)	2,700
Buffalo	352,387	Henry P. Emerson	4	Jan. 1, 1912	5,000
Canandaigua	6,151	Luther Norton Steele	1	Aug. 1, 1908	2,000
Catskill	5,484	J. T. P. Calkins	1	....do	1,500
Cohoes	23,910	Edward Hayward	4	July 1, 1909	2,000
Corning:					
District No. 9	11,061	Leigh Richmond Hunt	(d)	(d)	2,750
District No. 13		A. M. Blodgett	1	June —, 1908	1,600
Cortland	9,014	Ferdinand E. Smith	3	Aug. 1, 1909	2,250
Dansville	3,633	Edward J. Bonner	1	June 25, 1908	1,700
Dunkirk	11,616	George M. Wiley	1	July 31, 1908	2,200
Elmira	35,672	William J. Deans	(d)	(d)	2,350
Fishkill Landing	3,673	G. F. Du Bois	(b)	(b)	(b)
Fredonia	4,127	William B. Blaisdell	(b)	(b)	(b)
Fulton	5,281	James R. Fairgrieve	2	Dec. 31, 1909	2,400

[a] For 1906–7; no later information.
[b] No data.
[c] Bert Emery Merriam, 1908–9.
[d] Indefinite.
[e] Thomas W. Conway, 1908–9.

II.—City Superintendents, 1907–8—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per annum.
NEW YORK—continued.					
Geneva	10,433	William Henry Truesdale	(a)	(a)	$2,500
Glens Falls	12,613	E. W. Griffith	(b)	(b)	(b)
Gloversville	18,349	James A. Estee	1	July 31, 1908	2,600
Gouverneur	3,689	John B. Laidlaw	1	June —, 1908	1,600
Granville	2,700	Raymond E. Brown	1	June 30, 1908	1,600
Green Island	4,770	James Heatly	1	Aug. 1, 1908	1,800
Haverstraw	5,935	L. O. Markham	1	Sept. —, 1908	1,800
Hempstead	3,582	H. H. Chapman	1	June 20, 1908	2,300
Herkimer	5,555	Charles Latimer Mosher	1	June —, 1908	1,900
Hoosick Falls	5,671	Clyde L. Harvey	1	Sept. —, 1908	1,650
Hornell	11,918	Elmer S. Redman	1	June —, 1908	2,400
Hudson	9,528	Charles S. Williams	1	July —, 1908	2,000
Ilion	5,138	Frank D. Warren	1	June —, 1908	1,800
Ithaca	13,136	Frank D. Boynton	5	—— —, 1910	(b)
Jamestown	22,892	Rovillus R. Rogers	3	July 1, 1908	2,500
Johnstown	10,130	Frank W. Jennings	1	Sept. 1, 1908	2,200
Kingston	24,535	Sylvester R. Shear	(a)	(a)	2,800
Lancaster	3,750	Levi C. Higley	1	June 19, 1908	1,400
Lansingburg	12,595	George F. Sawyer	1	Sept. 1, 1908	1,800
Lestershire	3,111	Frank M. Smith	1	June 30, 1908	1,500
Little Falls	10,381	A. J. Merrell	1	July 31, 1908	2,000
Lockport	16,581	Emmet Belknap	1	Aug. 31, 1908	2,400
Lyons	4,300	W. H. Kinney	1	Sept. —, 1908	1,800
Malone	5,935	Miss Sarah Perry	(b)	(b)	(b)
Mamaroneck	4,722	George J. McAndrew	1	Sept. —, 1908	c 2,000
Matteawan	5,807	Norman C. Gile d	(b)	(b)	(b)
Mechanicsville	4,695	Lyman B. Blakeman	1	July 1, 1908	1,500
Medina	4,716	James C. Van Etten	1	June 26, 1908	1,800
Middletown	14,522	James F. Tuthill	1	June —, 1908	2,200
Mount Vernon	20,346	Charles E. Nichols	4	Feb. 15, 1909	3,250
Newark	4,578	William Marion Fort	1	Sept. —, 1908	1,600
Newburgh	24,943	James M. Crane	1	Mar. —, 1908	2,200
New Rochelle	14,720	Albert Leonard	3	Aug. 31, 1910	3,000
New York	3,437,202	William H. Maxwell	6	Mar. —, 1910	10,000
Niagara Falls	19,457	Reuben A. Taylor	1	July 31, 1908	2,500
North Tarrytown	4,241	C. Leslie Jaynes	1	June 16, 1908	1,600
North Tonawanda	9,069	Richard A. Searing	3	July —, 1909	2,300
Norwich	5,766	Stanford J. Gibson	1	June —, 1908	1,800
Nyack	4,275	Ira H. Lawton	(b)	(b)	(b)
Ogdensburg	12,633	H. H. Southwick d	(b)	(b)	(b)
Olean	9,462	Samuel J. Slawson	1	Aug. 1, 1908	2,200
Oneida	6,364	Avery W. Skinner	3	Aug. 1, 1910	2,000
Oneonta	7,147	Harry Westcott Rockwell	1	Sept. —, 1908	1,700
Ossining	7,939	W. H. Ryan	2	July —, 1909	2,500
Oswego	22,199	George E. Bullis	(b)	(b)	(b)
Owego	5,039	Francis C. Byrn e	1	Aug. 1, 1908	1,100
Peekskill:					
Dist. No. 7 (Drumhill)	10,358	William J. Millar	1	Aug. 31, 1908	1,800
Dist. No. 8 (Oakside)		Alexander D. Dunbar	1	July 31, 1908	2,000
Penn Yan	4,650	N. Winton Palmer	1	July 31, 1908	1,200
Plattsburg	8,434	Frank K. Watson	1	June 26, 1908	1,900
Port Chester	7,440	Edgar G. Lantman	3	July 1, 1910	2,800
Port Jervis	9,385	John M. Dolph	1	July 31, 1908	1,800
Potsdam	3,843	L. E. Roberts	1	June —, 1908	1,100
Poughkeepsie	24,029	William Alexander Smith	(a)	(a)	2,500
Rensselaer	7,466	Austin R. Coulson	2	July 31, 1908	1,500
Rochester	162,608	Clarence F. Carroll	4	July 15, 1911	5,000
Rome	15,343	Lewis N. Crane	1	Sept. —, 1908	2,300
Rye	3,603	Forrest F. Shults	3	June —, 1910	2,200
Salamanca	4,251	Thomas Stone Bell	1	June 26, 1908	1,700
Sandy Hill	4,473	Francis A. Tefft	(a)	(a)	1,600
Saratoga Springs	12,409	Thomas R. Kneil	(b)	(b)	(b)
Schenectady	31,682	John Thomas Freeman f	(a)	(a)	3,000
Seneca Falls	6,519	Everett K. Van Allen	1	June —, 1908	1,600
Solvay	3,493	C. O. Richards	1	Sept. —, 1908	1,800
Syracuse	108,374	Andrew Burr Blodgett	4	Jan. 1, 1911	4,000
Tarrytown	4,770	L. V. Case d	(b)	(b)	(b)
Tonawanda	7,421	Frank K. Sutley	3	June —, 1908	2,000
Troy	60,651	Edwin S. Harris g	(a)	(a)	3,000
Utica	56,383	Martin G. Benedict	(a)	(a)	3,300
Waterloo	4,256	Harry B. Smith	1	July —, 1908	1,800
Watertown	21,696	Frank S. Tisdale	1	Aug. 1, 1908	2,500
Watervliet	14,321	Hugh Henry Lansing	1	Sept. 1, 1908	1,800
Waverly	4,465	Edwin B. Robbins	1	July 1, 1908	1,500
Whitehall	4,377	George S. Ellis	1	June 30, 1908	1,600
White Plains	7,899	Guy H. Baskerville h	3	Aug. 1, 1908	2,900
Yonkers	47,931	Charles E. Gorton	(a)	(a)	5,000

a Indefinite.
b No data.
c Not including an allowance of $400 for expenses.
d For 1906–7; no later information.
e Isaac S. Carroll, 1908–9.
f A. R. Brubacher, 1908–9.
g Edward Edwards, jr., 1908–9.
h Charles C. Ramsay, 1908–9.

II.—City Superintendents, 1907–8—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per annum.
NORTH CAROLINA.					
Asheville	14,694	Richard J. Tighe	1	Aug. —,1908	$2,200
Burlington	3,692	Frank H. Curtiss	1	June 30,1908	1,500
Charlotte	18,091	Alexander Graham [a]	(b)	(b)	(b)
Concord	7,910	Jay D. Lentz [c]	(b)	(b)	(b)
Durham	6,679	William Donald Carmichael	1	June 3,1908	2,100
Elizabeth City	6,348	Samuel Lloyd Sheep	1	July 1,1908	1,500
Fayetteville	4,670	J. A. Jones	1	May 19,1908	1,600
Gastonia	4,610	Joseph S. Wray	1	May 31,1908	1,500
Goldsboro	5,877	Albert E. Waltz	1	May 22,1908	1,500
Greensboro	10,035	W. H. Swift [a]	(b)	(b)	(b)
Henderson	3,746	J. T. Alderman	(b)	(b)	(b)
High Point	4,163	George H. Crowell	1	May 2,1908	1,500
Kinston	4,106	L. Cranmer Brogden	1	May 8,1908	1,200
Newbern	9,090	Harvey B. Craven	1	June 30,1908	1,500
Raleigh	13,643	Francis Marion Harper	1	May 29,1908	2,000
Salisbury	6,277	Isaac C. Griffin	1	June 1,1908	1,500
Washington	4,842	Harry Howell	1	July 1,1908	1,500
Wilmington	20,976	John Jay Blair [a]	(b)	(b)	(b)
Wilson	3,525	Charles L. Coon	1	July 1,1908	1,500
Winston Salem	10,008	William Seaton Snipes	1	June 1,1908	1,500
NORTH DAKOTA.					
Bismarck	3,319	William Moore	(b)	(b)	(b)
Fargo	9,589	William E. Hoover	1	July 31,1908	2,400
Grand Forks	7,652	J. Nelson Kelly	(b)	(b)	(b)
Jamestown	2,853	A. G. Crane	1	May 29,1908	1,700
Minot	1,277	Samuel Henry Wolf	1	June 1,1908	1,800
Valley City	2,446	George W. Hanna	1	July 1,1908	1,800
OHIO.					
Akron	42,728	Henry V. Hotchkiss	5	Sept. 1,1910	3,600
Alliance	8,974	John E. Morris	3	July —,1908	2,000
Ashland	4,087	E. P. Dean [a]	(b)	(b)	(b)
Ashtabula	12,949	E. A. Hotchkiss	4	July 1,1911	2,400
Barberton	4,354	James M. Carr	2	Sept. 1,1909	1,650
Barnesville	3,721	William R. Butcher	1	Aug. 31,1908	1,500
Bellaire	9,912	J. R. Anderson [a]	(b)	(b)	(b)
Bellefontaine	6,649	John W. MacKinnon	2	Aug. 31,1909	750
Bellevue	4,101	E. F. Warner	2	(b)	1,400
Bowling Green	5,067	N. D. O. Wilson [a]	(b)	(b)	(b)
Bridgeport	3,963	Samuel A. Gillett	2	Sept. —,1909	1,800
Bucyrus	6,500	William Nelson Beetham	3	June —,1910	1,700
Cambridge	8,241	H. Z. Hobson	4	Sept. 1,1911	1,800
Canal Dover	5,422	Franklin P. Geiger	2	July 1,1909	1,650
Canton	30,667	John K. Baxter	3	July —,1908	2,700
Chillicothe	12,976	M. E. Hard	(b)	(b)	(b)
Cincinnati	325,902	Frank B. Dyer	5	Sept. —,1912	6,000
Circleville	6,991	C. L. Boyer	1	Sept. 1,1908	1,800
Cleveland	381,768	William H. Elson	5	—— —,1912	6,000
Collinwood	3,639	Frank P. Whitney	3	June —,1908	1,900
Columbus	125,560	Jacob A. Shawan	(b)	(b)	(b)
Conneaut	7,133	C. T. Northrop	5	July —,1910	2,000
Coshocton	6,473	Herman S. Piatt [d]	3	—— —,1908	1,800
Dayton	85,333	John Wesley Carr [e]	3	Aug. 31,1908	4,800
Defiance	7,579	Frank E. Reynolds	4	Aug. 31,1910	1,500
Delaware	7,940	William McK. Vance	3	Aug. 31,1909	2,200
Delphos	4,517	T. W. Shimp	1	Sept. —,1908	1,600
Dennison	3,763	W. H. Angel [a]	(b)	(b)	(b)
East Liverpool	16,485	Robert E. Rayman [f]	(b)	(b)	(b)
Elyria	8,791	William R. Comings	2	Sept. 1,1908	2,000
Findlay	17,613	J. N. Zeller	4	—— —,1911	[g] 2,300
Fostoria	7,730	Samuel Herrick Layton [h]	2	July —,1908	1,800
Fremont	8,439	J. E. Collins [a]	(b)	(b)	(b)
Galion	7,282	I. C. Guinther	3	July —,1909	1,900
Gallipolis	5,432	Harvey Evan Conard	2	July 1,1908	1,800
Greenfield	3,979	E. Wallace Patterson	2	Aug. —,1909	1,500
Greenville	5,501	William S. Rowe	1	July 1,1908	2,000
Hamilton	23,914	Darrell Joyce	3	Aug. —,1908	2,500
Hillsboro	4,535	F. H. Warren [i]	2	.....do.....	1,500
Ironton	11,868	Sardine P. Humphrey	4	Sept. 1,1909	1,900
Jackson	4,672	James E. Kinnison	3	June —,1908	1,700
Kent	4,541	Reed P. Clark	3	June 12,1908	1,800
Kenton	6,852	N. E. Hutchinson [a]	(b)	(b)	(b)
Lancaster	8,991	H. A. Cassidy	2	June 30,1909	1,800
Lima	21,723	John Davison	5	June 30,1910	2,400
Lorain	16,028	Albert C. Eldredge	3	Sept. 1,1908	2,000

[a] For 1906–7; no later information.
[b] No data.
[c] Acting superintendent.
[d] Succeeded by C. E. Bryant, April 1, 1908.
[e] Edwin J. Brown, 1908–9.
[f] F. H. Warren, 1908–9.
[g] For each of the last two years, $2,400.
[h] Successor for 1908–9 not known.
[i] W. E. Arter, 1908–9.

II.—City Superintendents, 1907–8—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per annum.
OHIO—continued.					
Mansfield	17,640	H. H. Helter	(a)	(a)	(a)
Marietta	13,348	J. V. McMillan	3	Aug. —, 1908	$2,100
Marion	11,862	H. L. Frank	(a)	(a)	(a)
Martins Ferry	7,760	Lewis Edwin York	2	Aug. —, 1909	2,000
Massillon	11,944	C. L. Cronebaugh	3	Aug. 31, 1908	2,100
Miamisburg	3,941	William F. Trump	3	Sept. —, 1910	1,800
Middletown	9,215	Arthur Powell	4	—— —, 1909	2,400
Mount Vernon	6,633	John S. Alan	3	—— —, 1910	2,000
Nelsonville	5,421	Aaron Grady	(a)	(a)	(a)
Newark	18,157	Joshua Dean Simkins	3	Sept. —, 1908	2,200
Newburg	5,909	B. F. Stevenson [b]	(a)	(a)	(a)
New Philadelphia	6,212	George C. Maurer	3	July —, 1908	1,850
Niles	7,468	Frank J. Roller	3	Sept. 1, 1908	2,220
North Baltimore	3,561	Gilbert L. Brown	1	May 22, 1908	1,200
Norwalk	7,074	A. D. Beechy	2	Aug. 31, 1908	1,700
Norwood	6,480	W. S. Cadman	(a)	(a)	(a)
Oberlin	4,082	Ward H. Nye [b]	(a)	(a)	(a)
Painesville	5,024	Franklin H. Kendall	3	June —, 1910	1,750
Piqua	12,172	J. Reuben Beachler	2	Sept. 1, 1909	2,000
Pomeroy	4,639	C. T. Coates	(a)	(a)	(a)
Portsmouth	17,870	John Imboden Hudson [c]	1	June 30, 1908	2,100
Ravenna	4,003	Edward O. Trescott	4	Sept. —, 1911	1,800
St. Bernard	3,384	U. L. Monce	(a)	(a)	(a)
St. Marys	5,359	Charles C. McBroom	1	June 1, 1908	1,200
Salem	7,582	Jesse S. Johnson	1	Aug. 31, 1908	2,000
Sandusky	19,664	Homer B. Williams	5	Aug. 31, 1909	2,600
Shelby	4,685	S. H. Maharry	4	May 29, 1910	1,500
Sidney	5,688	Herbert R. McVay	3	Sept. 1, 1908	1,950
Springfield	38,253	Carey Boggess	5	Aug. 31, 1912	2,700
Steubenville	14,349	Robert Louis Ervin	1	Aug. 31, 1908	2,300
Tiffin	10,989	Charles A. Krout	5	June —, 1912	1,800
Toledo	131,822	Charles L. Van Cleve	4	July 1, 1911	4,500
Toronto	3,526	S. K. Mardis	3	July —, 1908	1,650
Troy	5,881	Charles W. Cookson	3	Aug. 7, 1910	2,000
Uhrichsville	4,582	Luther E. Everett	3	Sept. —, 1908	1,350
Urbana	6,808	I. N. Keyser	3	(a)	1,800
Vanwert	6,422	J. P. Sharkey	5	Sept. —, 1910	1,800
Wapakoneta	3,915	Charles Haupert	1	Sept. 1, 1908	1,644
Warren	8,529	Charles E. Carey	5	Aug. 1, 1910	2,500
Washington C. H	5,751	James F. Tuttle	2	Aug. 31, 1909	1,800
Wellston	8,045	Elmer Sheridan McCall	3	.....do.....	1,500
Wellsville	6,146	James L. MacDonald [b]	(a)	(a)	(a)
Wilmington	3,613	Edwin P. West	3	Sept. 1, 1909	1,716
Wooster	6,063	E. L. Thompson [b]	(a)	(a)	(a)
Xenia	8,696	Edwin Bruce Cox	3	Aug. 31, 1908	2,000
Youngstown	44,885	N. H. Chaney	5	Aug. 31, 1910	3,500
Zanesville	23,538	William D. Lash	3	July 1, 1908	2,500
OKLAHOMA.					
Ardmore	5,681	Charles Evans	1	May 1, 1908	1,800
Chickasha	3,209	W. P. Stewart	1	Sept. 2, 1907	1,500
Durant	2,969	Joseph C. Adamson	1	June 1, 1908	1,000
El Reno	3,383	Fred N. Howell	1	May 31, 1908	1,500
Enid	3,444	T. W. B. Everhart	1	July 5, 1908	2,000
Guthrie	10,006	Roy C. Cain	1	July 1, 1908	1,500
McAlester	3,479	William Gay	1	May 29, 1908	1,500
Muskogee	4,254	Charles W. Briles	1	June 30, 1908	1,700
Oklahoma City	10,037	John Blackstone Taylor	1	July 1, 1908	2,200
Perry	3,351	William Z. Smith	1	May 22, 1908	1,200
Ponca	2,528	R. E. Tope	2	June 1, 1908	1,200
Shawnee	3,462	Scott Glen [b]	(a)	(a)	(a)
OREGON.					
Astoria	8,381	Abraham L. Clark	1	Aug. 1, 1908	1,500
Baker City	6,663	Julius A. Churchill	1	—— — 1908	2,100
Eugene	3,236	L. R. Alderman	(a)	(a)	(a)
Pendleton	4,406	J. S. Landers	1	May 31, 1908	1,800
Portland	90,426	Frank Rigler [b]	(a)	(a)	(a)
Salem	4,258	James M. Powers	1	July 1, 1908	1,500
The Dalles	3,542	Arthur C. Strange	1	June —, 1908	1,550
PENNSYLVANIA.					
Allegheny	129,896	John Morrow	(a)	(a)	(a)
Allentown	35,416	Francis D. Raub	3	June 1, 1908	1,750
Altoona	38,973	Homer J. Wightman [d]	3	May —, 1908	2,400
Archbald	5,396	William A. Kelly	3	June 1, 1908	1,200
Ashland	6,438	William C. Estler	3	—— —, 1908	1,260

[a] No data.
[b] For 1906–7; no later information.
[c] Succeeded Jan. 1, 1908, by Frank Appel.
[d] H. H. Baish, 1908–9.

II.—City Superintendents, 1907–8—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per annum.
PENNSYLVANIA—con.					
Ashley (Sta., Wilkes-Barre).	4,046	George W. Houck	(a)	(a)	(a)
Athens	3,749	George E. Rogers	1	Sept. —, 1908	$1,400
Bangor	4,106	John Wesley Gruver	3	June 1, 1908	1,200
Beaver Falls	10,054	Edward Maguire [b]	3	do	1,800
Bellefonte	4,216	John D. Meyer	3	June —, 1908	1,500
Bellevue	3,416	Curtis C. Williamson	1	do	2,050
Berwick	3,916	James G. Sigman	1	June 1, 1908	1,200
Bethlehem	7,293	Fred W. Robbins	3	do	1,800
Blakely (P. O., Peckville).	3,915	Harry Bevan Anthony [c]	1	June 15, 1908	900
Bloomsburg	6,170	Lloyd Parvin Sterner	3	June 1, 1908	1,300
Braddock	15,654	Grant Norris	3	June —, 1908	2,400
Bradford	15,029	E. E. Miller	3	(a)	2,600
Bristol	7,104	Louise D. Baggs	3	June 1, 1908	1,000
Butler	10,853	John Arthur Gibson	3	do	2,500
Carbondale	13,536	Thomas L. Gilmartin	(a)	(a)	(a)
Carlisle	9,626	John C. Wagner	3	June —, 1908	1,400
Carnegie	7,330	William S. Bryan [d]	3	June 1, 1908	1,710
Catasauqua	3,963	H. J. Reinhard [c e]	(a)	(a)	(a)
Chambersburg	8,864	Samuel Gelwix	3	June 1, 1908	1,200
Charleroi	5,930	William D. Wright	1	do	1,600
Chester	33,988	Thomas S. Cole	3	June —, 1908	2,200
Clearfield	5,081	William H. Sprenkle	1	do	1,500
Coatesville	5,721	William T. Gordon	3	June 1, 1908	1,500
Columbia	12,316	Daniel Fleisher	(a)	(a)	(a)
Connellsville	7,160	Walter S. Deffenbaugh	2	June —, 1909	1,500
Conshohocken	5,762	Elmer Bergey Ziegler	3	June —, 1908	1,500
Corry	5,369	Virgil G. Curtis	3	do	1,600
Danville	8,042	Daniel N. Dieffenbacher	3	June 1, 1908	1,200
Darby	3,429	Charles P. Sweeney [c]	1	June —, 1908	1,500
Dickson City	4,948	James P. Wilson	3	Aug. 14, 1909	1,020
Donora		Ora Earnest Rose	1	June 1, 1908	1,500
Dubois	9,375	J. H. Alleman	3	do	2,000
Dunmore	12,583	Charles F. Hoban	3	June —, 1908	1,800
Duquesne	9,036	Clyde Henry Wolford	1	June 1, 1908	2,100
Duryea		Frederick J. Regan	3	July —, 1910	1,200
Easton	25,238	William White Cottingham	3	June —, 1908	2,000
Edwardsdale	5,165	J. O. Herman [e]	(a)	(a)	(a)
Erie	52,733	Henry Clay Messimer	3	June —, 1908	3,600
Etna	5,384	J. Q. A. Irvine	3	do	1,700
Forest City	4,279	F. D. Van Orsdale	1	May 13, 1908	900
Franklin	7,317	Charles E. Lord	3	June 1, 1908	1,800
Freeland	5,254	E. F. Hanlon [e]	(a)	(a)	(a)
Gilberton	4,373	Michel J. Shore [d e]	(a)	(a)	(a)
Greensburg	6,508	Thomas S. March	3	June —, 1908	2,100
Greenville	4,814	James J. Palmer	3	June 1, 1908	1,600
Hanover	5,302	Joseph Caldwell Carey	3	do	1,200
Harrisburg	50,167	Frederick E. Downes	3	June —, 1908	2,800
Hazleton	14,230	David A. Harman	3	June 8, 1908	2,200
Homestead	12,554	James M. Norris	3	June 1, 1908	2,400
Huntingdon	6,053	E. R. Barclay	3	do	1,350
Indiana	4,142	James F. Chapman [d e]	(a)	(a)	(a)
Jeannette	5,865	Theo. B. Shank	3	June 6, 1908	1,500
Jersey Shore	3,070	H. H. Weber [d e]	(a)	(a)	(a)
Johnsonburg	3,894	G. B. Gerberich	3	—— —, 1908	1,550
Johnstown	35,936	James Nicol Muir	3	May 30, 1908	2,500
Kane	5,296	T. E. Lytle	3	June —, 1908	1,750
Kingston	3,846	George Evans [d]	1	Sept. 1, 1908	1,600
Kittanning	3,902	Frank W. Goodwin	3	June 1, 1908	1,600
Knoxville	3,511	Frederick C. Wilcox [d e]	(a)	(a)	(a)
Lancaster	41,459	Robert Koch Buehrle	3	—— —, 1908	2,000
Lansford	4,888	Elmer E. Kuntz	3	June 1, 1908	1,500
Latrobe	4,614	Arthur C. Klock	3	June 1, 1910	2,000
Lebanon	17,628	Robert T. Adams	3	June —, 1908	1,600
Lehighton	4,629	B. M. Shull [e]	(a)	(a)	(a)
Lewistown	4,451	W. F. Kennedy [c]	(a)	(a)	(a)
Lock Haven	7,210	Thomas M. Morrison [f]	3	June —, 1908	1,100
Luzerne	3,817	Theron G. Osborne [e]	(a)	(a)	(a)
McKeesport	34,227	J. Burdett Richey	(a)	(a)	(a)
McKees Rocks	6,352	F. H. Powers	3	June 1, 1910	2,250
Mahanoy City	13,504	William N. Ehrhart	3	June 1, 1908	1,650
Mauch Chunk	4,029	Halliday R. Jackson [e]	(g)	(a)	(a)
Meadville	10,291	Ulysses Grant Smith [g]	3	June —, 1908	1,800
Middletown	5,608	Harry J. Wickey	3	June 1, 1908	1,080
Millvale (Sta., Allegheny).	6,736	John C. R. Johnston	1	Sept. —, 1908	1,375

[a] No data.
[b] Andrew Lester, 1908–9.
[c] Supervising principal.
[d] Principal.
[e] For 1906–7; no later information.
[f] E. S. Ling, 1908–9.
[g] R. H. Bellows, 1908–9.

II.—City Superintendents, 1907–8—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per annum.
PENNSYLVANIA—con.					
Milton	6,175	William Andrew Wilson	3	June 1,1908	$1,800
Minersville	4,815	Henry H. Spayd	3	June 9,1908	1,500
Monessen	2,197	Robert Wesley Himelich	3	June —,1908	1,800
Monongahela City	5,173	Renwick G. Dean	3	June 1 1910	1,600
Mount Carmel	13,179	Samuel H. Dean	3	June 1,1908	1,500
Mount Pleasant	4,745	Uric Lee Gordy	1	June 1,1908	1,500
Nanticoke	12,116	John William Griffith	(a)	(a)	(a)
New Brighton	6,820	Clyde C. Green	2	June 1,1908	1,700
New Castle	28,339	Thomas A. Kimes	3	June —,1908	1,800
New Kensington	4,665	Arthur D. Horton	1	June 1,1908	1,620
Norristown	22,265	A. S. Martin	3	do	2,250
North Braddock	6,535	J. L. Spetler	1	do	1,600
Oil City	13,264	C. A. Babcock [b]	(a)	(a)	(a)
Old Forge	5,630	Francis R. Coyne	3	June 1,1908	1,200
Olyphant	6,180	Michael W. Cummings	3	do	1,200
Philadelphia	1,293,697	Martin G. Brumbaugh	1	Dec. 31,1908	7,500
Phoenixville	9,196	Robert Edward Laramy	3	June 1,1908	1,500
Pittsburg	321,616	Samuel Andrews	3	June —,1908	6,000
Pittston	12,556	Robert S. Thompson Shiel	3	June 7,1908	1,800
Plymouth	13,649	Edwin H. Scott	1	June 1,1908	1,500
Pottstown	13,696	William W. Rupert	3	May 4,1908	1,600
Pottsville	15,710	Stephen A. Thurlow	2	May —,1908	1,800
Punxsutawney	4,375	A. M. Hammers	1	June —,1908	1,800
Rankin	3,775	M. E. Thompson [c]	(a)	(a)	(a)
Reading	78,961	Charles S. Foos	3	June —,1908	3,000
Renovo	4,082	Jesse McKe Hostetter [d]	1	May 17,1908	1,000
Ridgway	3,515	Walter Merton Peirce	3	May 31,1908	2,000
Rochester	4,688	Orrin C. Lester	3	June 1,1908	1,500
St. Clair	4,638	Thomas G. Jones [c]	(a)	(a)	(a)
St. Marys	4,295	J. J. Lynch	1	May 22,1908	1,500
Sayre	5,243	I. F. Stetler [e]	(a)	(a)	(a)
Scottdale	4,261	Edgar Reed	1	June 1,1908	1,650
Scranton	102,026	George W. Phillips [f]	3	do	4,000
Sewickley	3,568	Frank E. Fickinger	1	do	2,200
Shamokin	18,202	Joseph Howerth	3	do	2,000
Sharon	8,916	Samuel H. Hadley	3	do	2,000
Sharpsburg	6,842	C. C. Kelso	3	June —,1908	1,800
Shenandoah	20,321	J. W. Cooper	3	June 9,1908	1,800
Slatington	3,773	James Wilson Snyder	2	June —,1908	1,500
South Bethlehem	13,241	Owen R. Wilt	3	do	1,500
South Sharon	.....	Calvin Grant Canon [g]	3	June 1,1908	1,600
Steelton	12,086	L. E. McGinnes	3	do	2,250
Sunbury	9,810	Ira Shipman [h]	3	June —,1908	1,500
Tamaqua	7,267	J. F. Derr	(a)	(a)	(a)
Tarentum	5,472	Andrew D. Endsley	3	June —,1908	1,800
Taylor	4,215	M. J. Lloyd	(a)	(a)	(a)
Titusville	8,244	Henry Pease	3	June 1,1908	2,100
Towanda	4,663	J. H. Humphries	1	June 10,1908	1,500
Turtle Creek	3,262	David R. Sumstine	3	June —,1909	1,800
Tyrone	5,847	Ira C. M. Ellenberger [i]	3	June 1,1908	1,540
Uniontown	7,344	Clifford John Scott	1	Aug. 1,1908	2,000
Warren	8,043	W. L. MacGowan	3	——, 1908	2,250
Washington	7,670	William Krichbaum	(a)	(a)	(a)
Waynesboro	5,396	J. H. Reber	3	June —,1908	1,300
West Chester	9,524	Addison L. Jones	3	June 1,1908	2,500
West Pittston	5,846	Louis P. Bierly	1	June —,1908	1,800
Wilkes-Barre	51,721	James M. Coughlin	3	do	3,500
Wilkinsburg	11,886	James L. Allison	3	June 1,1908	2,500
Williamsport	28,757	Charles Loose	3	do	2,200
Wilmerding	4,179	W. G. Gans [c]	(a)	(a)	(a)
Windber	.....	D. M. Hetrick	1	May 1,1908	1,000
York	33,708	Atreus Wanner	3	—— —,1908	2,000
RHODE ISLAND.					
Bristol	6,901	John P. Reynolds	1	Sept. 26,1908	1,500
Burrillville	6,317	Leroy G. Staples	1	June 30,1908	1,500
Central Falls	18,167	Wendell A. Mowry	1	Feb. —,1908	2,000
Coventry (P. O., Anthony).	5,279	J. G. Ulmer	1	Aug. —,1908	1,500
Cranston	13,343	Valentine Almy	1	Nov. —,1908	1,700
Cumberland	8,925	Charles C. Richardson	1	June 30,1908	1,500
East Providence	12,138	J. W. Dows	1	Jan. —,1909	1,700
Johnston	4,305	Rev. William Henry Starr	1	Nov. —,1908	1,500

[a] No data.
[b] James J. Palmer, 1908–9.
[c] For 1906–7: no later information.
[d] Elected superintendent at South Sharon, 1908–9; successor not known.
[e] Succeeded January, 1908, by L. Edwin Delaney.
[f] George Howell, 1908–9.
[g] Jesse McKe Hostetter, 1908–9.
[h] Ira C. M. Ellenberger, 1908–9.
[i] Elected superintendent at Sunbury, 1908–9; successor not known.

II.—City Superintendents, 1907–8—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per annum.
RHODE ISLAND—con.					
Lincoln	8,937	Emerson Leland Adams	1	Dec. 1,1908	$1,500
Newport	22,034	Herbert Warren Lull	1	Jan. 11,1909	3,000
North Kingstown	4,194	Frederic Dana Blake	1	June 6,1908	400
Pawtucket	39,231	Frank O. Draper	1	Jan. —,1909	2,800
Providence	175,597	Walter H. Small	(a)	(a)	5,000
South Kingstown (P. O., Kingston).	4,972	B. E. Helme [b]	(c)	(c)	(c)
Warren	5,108	Charles G. Persons	1	June —,1908	1,800
Warwick	21,316	Elwood T. Wyman	1	Dec. 1,1908	2,000
Westerly	7,541	William H. Holmes, jr	1	June —,1908	2,500
Woonsocket	28,204	Frank E. McFee	1	Jan. —,1909	2,000
SOUTH CAROLINA.					
Abbeville	3,766	Leonard White Dick	1	May 27,1908	1,200
Aiken	3,414	W. L. Brookes	(c)	(c)	(c)
Anderson	5,498	E. C. McCants	2	June 22,1909	1,500
Beaufort	4,110	Lueco Gunter	(c)	(c)	(c)
Charleston	55,807	Henry P. Archer	4	Dec. 31,1911	2,500
Chester	4,075	W. H. McNairy	1	June 1,1908	1,400
Columbia	21,108	Ernest S. Dreher	1	Sept. —,1908	2,000
Florence	4,647	J. L. Mann [b]	(c)	(c)	(c)
Gaffney	3,937	Joseph Theodore Spears	1	May —,1908	900
Georgetown	4,138	William Clarence Bynum	1	June 12,1908	1,200
Greenville	11,860	E. L. Hughes [b]	(c)	(c)	(c)
Greenwood	4,824	Edward C. Coker [b]	(c)	(c)	(c)
Laurens	4,029	R. A. Dobson [b]	(c)	(c)	(c)
Newberry	4,607	W. A. Stuckey	(c)	(c)	(c)
Orangeburg	4,455	Albert Jerome Thackston	1	June —,1908	1,700
Rockhill	5,485	John Coleman Cork	1	June 1,1908	1,500
Spartanburg	11,395	Frank Evans	1	June 6,1908	1,650
Sumter	5,673	S. H. Edmunds	(c)	(c)	2,400
Union	5,400	Davis Jeffries	1	May 29,1908	1,400
SOUTH DAKOTA.					
Aberdeen	4,087	W. Lemuel Cochrane [d]	1	Sept. 1,1908	2,000
Deadwood	3,498	Alexander Strachan	1	June 30,1908	2,000
Lead	6,210	Anson H. Bigelow	2	July 1,1908	2,700
Mitchell	4,055	Freeman Hugh Hoff	1	May 29,1908	1,700
Sioux Falls	10,266	Archibald A. McDonald	1	July 1,1908	1,800
Watertown	3,352	Lester B. Parsons	1	June 1,1908	1,500
Yankton	4,125	Rufus Clark Shellenbarger	1	June —,1908	1,800
TENNESSEE.					
Bristol	5,271	Samuel G. Anspach	1	June 30,1908	1,300
Chattanooga	30,154	Sidney G. Gilbreath	3	June —,1910	2,500
Clarksville	9,431	Perry Lee Harned	1	June 30,1908	1,800
Cleveland	3,858	D. C. Arnold [b]	(c)	(c)	(c)
Columbia	6,052	William Eugene Bostick	1	June 15,1908	1,200
Dyersburg	3,647	Clarence M. Walker	1	May 31,1908	1,125
Harriman	3,442	J. V. Rymer [b]	(c)	(c)	(c)
Jackson	14,511	Gentry R. McGee	1	Aug. 31,1908	1,700
Johnson City	4,645	John Edwin Crouch	1	....do....	1,200
Knoxville	32,637	Seymour A. Mynders [b]	(c)	(c)	(c)
Memphis	102,320	I. C. McNeill	2	July —,1909	3,600
Murfreesboro	3,999	J. W. W. Daniels [b]	(c)	(c)	(c)
Nashville	80,865	Henri C. Weber	5	June —,1910	3,000
TEXAS.					
Austin	22,258	A. N. McCallum	(c)	(c)	(c)
Beaumont	9,427	H. F. Triplett	2	July 15,1908	2,000
Belton	3,700	James B. Hubbard	1	June 5,1908	2,000
Bonham	5,042	I. W. Evans	1	May 29,1908	1,500
Brenham	5,968	Peyton Irving, jr	1	Sept. 1,1908	1,600
Brownsville	5,308	Ignatius L. Candler	2	May 30,1908	1,200
Brownwood	3,965	George H. Carpenter	2	May 22,1908	1,500
Cleburne	7,493	R. G. Hall	(c)	(c)	(c)
Corpus Christi	4,703	Charles Walton Crossley	2	Aug. 31,1908	1,800
Corsicana	9,313	James William Cantwell [e]	1	July 1,1908	1,800
Dallas	42,638	J. L. Long [f]	(b)	(b)	(b)
Denison	11,807	Frank Ben Hughes	2	June 7,1908	1,800
Denton	4,187	J. S. Carlisle	(b)	(b)	(b)
El Paso	15,906	G. P. Putnam [g]	2	Sept. —,1908	2,400
Ennis	4,919	Samuel Alexander Wyatt	1	May 15,1908	1,500
Fort Worth	26,688	Walter D. Williams [h]	1	June 30,1908	2,400

[a] Indefinite.
[b] For 1906–7; no later information.
[c] No data.
[d] W. P. Dunlevy, 1908–9.
[e] Elected for 1908–9 at Fort Worth; successor not known.
[f] Arthur Lefevre, 1908–9.
[g] F. M. Martin, 1908–9.
[h] James William Cantwell, 1908–9.

II.—City Superintendents, 1907–8—Continued.

City.	Population. (Census of 1900,)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per annum.
TEXAS—continued.					
Gainesville	7,874	E. F Comegys	1	May 30,1908	$2,000
Galveston	37,789	John William Hopkins	1	June —,1908	3,000
Gonzales	4,297	Miss Rozelle Nicholson	1	May 29,1908	1,200
Greenville	6,860	Louis Clyde Gee	1	July 31,1908	1,500
Hillsboro	5,346	Thomas Dudley Brooks	1	.....do.....	1,320
Houston	44,633	Paul Whitfield Horn	2	June 12,1908	3,000
Laredo	13,429	L. J. Christen	(a)	(a)	(a)
McKinney	4,342	John H. Hill	1	Aug. 31,1908	1,000
Marlin	3,090	Walter Francis Doughty	1	July —,1908	1,500
Marshall	7,855	W. H. Attebery	1	Sept. 1,1908	1,500
Navasota	3,857	William Bennett Bizzell	1	June 1,1908	1,500
Orange	3,835	S. B. Foster	(a)	(a)	(a)
Palestine	8,297	Walker King	1	Aug. 31,1908	1,600
Paris	9,358	J. G. Wooten	2	Aug. 31,1909	2,000
San Antonio	53,321	Lloyd E. Wolfe [b]	1	Aug. 31,1908	3,000
Sherman	10,243	J. C. Pyle	1	June 1,1908	1,800
Taylor	4,211	William M. Williams [c]	2	June 1,1908	1,500
Temple	7,065	Justin F. Kimball	(a)	(a)	(a)
Terrell	6,330	S. M. N. Marrs	1	June 30,1908	1,500
Texarkana	5,256	Edgar Elliott Bramlette	2	July 31,1909	2,000
Tyler	8,069	W. T. Adams	(a)	(a)	(a)
Victoria	4,010	Arthur Lefevre	1	Aug. 31,1908	2,000
Waco	20,686	John C. Lattimore	1	June 30,1908	2,000
Waxahachie	4,215	Walter Acker	1	Aug. 31,1908	1,560
Weatherford	4,786	Thomas Williams Stanley	1	May 31,1908	1,200
UTAH.					
Logan	5,451	A. Molyneux	5	Aug. —,1908	1,500
Ogden	16,313	William Allison	2	June —,1908	2,000
Park City	3,759	J. M. Martin	2	June 5,1908	1,800
Provo	6,185	William S. Rawlings	2	June —,1908	1,250
Salt Lake City	53,531	D. H. Christensen	2	June 30,1908	4,000
VERMONT.					
Barre	8,448	O. D. Mathewson	1	Apr. —,1909	2,500
Bellows Falls	4,337	Bert Emery Merriam [d]	1	June 30,1908	1,650
Bennington	5,656	Albert W. Varney	1	July 1,1909	1,800
Brattleboro	5,297	Miss Marguerite Tucker	1	June 19,1908	950
Burlington	18,640	Henry O. Wheeler	1	Apr. —,1908	2,000
Montpelier	6,266	Fred J. Brownscombe	1	June —,1908	2,000
Rutland	11,499	David B. Locke [e]	1	June 30,1908	1,800
St. Albans	6,239	James Annan Ayers	1	.....do.....	2,400
St. Johnsbury	5,666	Clarence H. Dempsey [f]	1	July 1,1908	2,000
VIRGINIA.					
Alexandria	14,528	Kosciusko Kemper	4	July 31,1909	720
Bristol	4,579	S. R. McChesney [g]	(a)	(a)	(a)
Charlottesville	6,449	James W. Lane [g]	(a)	(a)	(a)
Danville	16,520	William Holmes Davis	4	July —,1909	2,075
Fredericksburg	5,068	Benjamin P. Willis	4	July 1,1909	400
Lynchburg	18,891	E. C. Glass [g]	(a)	(a)	(a)
Manchester	9,715	David L. Pulliam [g]	(a)	(a)	(a)
Newport News	19,635	William C. Morton	4	July 1,1909	1,650
Norfolk	46,624	Richard Augustus Dobie	4	.....do.....	2,755
Petersburg	21,810	Duncan M. Brown	4	June 30,1909	1,600
Portsmouth	17,427	John C. Ashton	4	July 1,1909	975
Radford	3,344	Leonidas W. Irwin	4	.....do.....	200
Richmond	85,050	Wm. F. Fox	4	—— —,1909	2,685
Roanoke	21,495	Bushrod Rust	4	June 30,1909	1,675
Staunton	7,289	Francis H. Smith, jr	4	July 1,1909	1,520
Suffolk	3,827	Lee Britt	4	June 30,1909	720
Winchester	5,161	Maurice M. Lynch	4	.....do.....	600
WASHINGTON.					
Aberdeen	3,747	H. M. Cook [h]	3	July 1,1910	2,500
Ballard [i]					
Bellingham	11,062	W. J. Hughes	(a)	(a)	(a)
Everett	7,838	D. A. Thornburg	3	July 1,1907	2,500
North Yakima	3,154	David Craig Reed	3	Aug. 1,1910	2,400
Olympia	4,082	Frank Oren Kreager	1	June 30,1908	1,500
Seattle	80,671	Frank B. Cooper	3	—— —,1910	5,000
Spokane	36,848	James A. Tormey [j]	3	July 1,1910	4,000
Tacoma	37,714	Albert Henry Yoder	3	July 1,1909	3,250
Vancouver	4,006	Charles W. Shumway	1	Aug. —,1908	1,620
Walla Walla	10,049	Orrin S. Jones	2	July —,1908	2,400

[a] No data.
[b] C. J. Lukin, 1908–9.
[c] Successor not known.
[d] Marshall O. Edson, 1908–9.
[e] Charles L. Randall, superintendent for 1908 of Rutland, Holden, Paxton, and Oakham.
[f] Corwin F. Palmer, 1908–9.
[g] For 1906–7; no later information.
[h] Arthur Wilson, 1908–9.
[i] Annexed to Seattle, May 27, 1907.
[j] Bruce M. Watson, 1908–9.

II.—City Superintendents, 1907–8—Continued.

City.	Population. (Census of 1900.)	Superintendent.	Term of office in years.	Expiration of present term.	Salary per annum.
WEST VIRGINIA.					
Benwood	4,511	Harry Lewis Pedicord	1	June 12,1908	$1,000
Bluefield	4,644	George M. Ford	1	June 30,1908	1,700
Charleston	11,099	George S. Laidley	1	June 8,1908	2,700
Clarksburg	4,050	Frank L. Burdette	1	June 30,1908	1,500
Fairmont	5,655	Joseph Rosier	1	....do....	1,800
Grafton	5,650	M. M. Brooks	1	May —,1908	1,500
Hinton	3,763	I. B. Bush [a]	(b)	(b)	(b)
Huntington	11,923	Wilson M. Foulk	1	June 31,1908	2,000
Martinsburg	7,564	George W. Brindle	2	June 30,1908	1,200
Moundsville	5,362	William M. Henderson	1	July 1,1908	1,250
Parkersburg	11,703	Daniel C. Tabler	1	....do....	2,000
Wheeling	38,878	Hervey B. Work	2	July —,1909	2,500
WISCONSIN.					
Antigo	5,145	W. H. Hickok	1	July 1,1908	1,800
Appleton	15,085	Carrie E. Morgan	1	....do....	700
Ashland	13,074	J. T. Hooper	1	July 31,1908	2,500
Baraboo	5,751	Gustave Wm. Gehrand [c]	1	July 1,1908	2,000
Beaver Dam	5,128	John T. Wilson	1	June 26,1908	1,400
Beloit	10,436	Franklin E. Converse	1	Aug. —,1908	2,300
Berlin	4,489	Edwin Thomas O'Brien [d]	1	Sept. 8,1909	1,750
Chippewa Falls	8,094	G. W. Swartz	1	Sept. 5,1908	2,000
Depere:					
East side	4,038	John W. Steenis [e]	1	June 14,1908	1,330
West side		Thomas J. Berto	1	June —,1908	1,000
Eau Claire	17,517	W. H. Schulz	(b)	(b)	(b)
Fond du Lac	15,110	William Wilson	1	June 30,1908	1,800
Grand Rapids	4,493	Henry S. Yonker	1	June 1,1908	1,800
Green Bay	18,684	A. W. Burton	1	Aug. —,1908	2,000
Janesville	13,185	H. C. Buell	(b)	(b)	(b)
Kaukauna	5,115	Leslie Bunker	(b)	Aug. 15,1908	(b)
Kenosha	11,606	P. J. Zimmers	1	June 30,1908	2,200
La Crosse	28,895	John P. Bird	1	July —,1908	2,300
Madison	19,164	Richard B. Dudgeon	1	June 30,1908	2,500
Manitowoc	11,786	Walter E. Larson	2	June 30,1909	1,400
Marinette	16,195	George H. Landgraf	1	June 30,1908	2,400
Marshfield	5,240	Durant C. Gile	1	June 15,1908	1,750
Menasha	5,589	John Callahan	1	April 15,1908	1,800
Menomonie	5,655	L. D. Harvey	(f)	(f)	5,000
Merrill	8,537	Gilbert J. Roberts	1	May 29,1908	1,600
Milwaukee	285,315	Carroll Garner Pearse	3	July 1,1910	6,000
Monroe	3,927	E. J. Shives [g]	(b)	(b)	(b)
Neenah	5,954	Edward Monroe Beeman	1	July 1,1908	1,800
Oconto	5,646	G. F. Loomis [h]	1	June —,1908	1,80
Oshkosh	28,284	Matthew N. McIver	1	Aug. —,1908	2,400
Platteville	3,340	O. E. Gray	(b)	(b)	(b)
Portage	5,459	W. G. Cough [a]	(b)	(b)	(b)
Racine	29,102	Burton E. Nelson	1	Aug. 1,1908	2,500
Rhinelander	4,998	W. B. Collins [i]	(b)	(b)	(b)
Sheboygan	22,962	Henry F. Leverenz	1	Apr. 1,1908	2,000
South Milwaukee	3,392	John Henry Stauff	1	July 1,1908	1,350
Stevens Point	9,524	John Nicholas Davis	1	Sept. —,1908	1,800
Stoughton	3,431	George Orton Banting	2	June —,1909	1,800
Sturgeon Bay	3,372	Charles G. Stangel	1	July 1,1908	1,650
Superior	31,091	William E. Maddock	1	....do....	2,400
Two Rivers	.....	William James Hamilton	1	....do....	1,600
Washburn	6,814	Stephen A. Oscar	1	June 1,1908	1,400
Watertown	8,437	W. P. Roseman	1	May —,1908	1,800
Waukesha	7,419	Addison W. Chamberlin [j]	1	June 12,1907	1,850
Wausau	12,354	Silas B. Tobey	1	July —,1908	2,300
WYOMING.					
Cheyenne	14,087	S. S. Stockwell	1	July 10,1908	2,200
Laramie	8,207	F. W. Lee	(b)	(b)	(b)
Rock Springs	4,363	Oscar J. Blakesley	1	June —,1908	1,800
Sheridan	1,559	Charles R. Atkinson [k]	1	June 1,1908	1,800

[a] For 1906–7; no later information.
[b] No data.
[c] H. R. Chamberlain, 1908–9.
[d] H. C. Stair, 1908–9.
[e] Charles C. Bishop, 1908–9.
[f] Indefinite.
[g] George P. Haverson, 1908–9.
[h] J. F. Bergen, 1908–9.
[i] F. A. Harrison, 1908–9.
[j] G. F. Loomis, 1908–9.
[k] John Jacob Early, 1908–9.

III.—College Presidents.

1.—*Colleges for men, coeducational colleges of liberal arts, and schools of technology.*

Location.	University or college.	Name of president.
ALABAMA.		
Auburn	Alabama Polytechnic Institute	Charles C. Thach, A. M.
Eastlake	Howard College	A. P. Montague, LL. D.
Greensboro	Southern University	Rev. S. M. Hosmer, D. D.
St. Bernard	St. Bernard College	Rev. Benedict Menges, O. S. B.
Spring Hill	Spring Hill College	Rev. William Tyrrell, S. J.
University	University of Alabama	John W. Abercrombie, LL. D.
ARIZONA.		
Tucson	University of Arizona	Kendric C. Babcock, Ph. D.
ARKANSAS.		
Arkadelphia	Henderson College	John H. Hinemon, A. M.
Do	Ouachita College	Henry S. Hartzog.
Batesville	Arkansas College	Eugene R. Long, Ph. D.
Clarksville	Arkansas Cumberland College	Rev. G. D. Crawford.
Conway	Hendrix College	Rev. S. Anderson, A. B.
Fayetteville	University of Arkansas	John N. Tillman, LL. B.
Little Rock	Philander Smith College	Rev. J. M. Cox, D. D.
CALIFORNIA.		
Berkeley	University of California	B. I. Wheeler, LL. D.
Claremont	Pomona College	Rev. George A. Gates, LL. D.
Los Angeles	Occidental College	John W. Baer, LL. D.
Do	St. Vincent's College	Rev. J. S. Glass, C. M., D. D.
Do	University of Southern California	Rev. George F. Bovard, D. D.
Oakland	California College	Arthur A. Macurda, A. M.
Do	St. Mary's College	Rev. Brother Vellesian, F. S. C.
Pasadena	Throop Polytechnic Institute	Arthur H. Chamberlain, A. M.
San Francisco	St. Ignatius College	Rev. John P. Frieden, S. J.
San Jose	University of the Pacific	Moses S. Cross, D. D., acting.
Santa Clara	Santa Clara College	Rev. Richard A. Gleeson, S. J.
Stanford University	Leland Stanford Junior University	D. S. Jordan, LL. D.
COLORADO.		
Boulder	University of Colorado	James H. Baker, LL. D.
Colorado Springs	Colorado College	Rev. W. F. Slocum, LL. D.
Denver	College of the Sacred Heart	Rev. J. J. Brown.
Do	Westminster University	Rev. Joseph L. Weaver, D. D.
Fort Collins	Colorado Agricultural College	Barton O. Aylesworth, LL. D.
Golden	State School of Mines	Victor C. Alderson, Sc. D.
University Park	University of Denver	Rev. Henry A. Buchtel, LL. D., chancellor.
CONNECTICUT.		
Hartford	Trinity College	Flavel S. Luther, LL. D.
Middletown	Wesleyan University	Wm. N. Rice, acting.
New Haven	Yale University	Arthur T. Hadley, LL. D.
Storrs	Connecticut Agricultural College	C. H. Beach.
DELAWARE.		
Dover	State College for Colored Students	Rev. W. C. Jason, A. M.
Newark	Delaware College	Geo. A. Harter, Ph. D.
DISTRICT OF COLUMBIA.		
Washington	Catholic University of America	Rev. Dennis J. O'Connell, S. T. D., rector.
Do	Gallaudet College	E. M. Gallaudet, LL. D.
Do	Georgetown University	Rev. Joseph Himmel, S. J.
Do	George Washington University	Charles W. Needham, LL. D.
Do	Howard University	Rev. Wilbur P. Thirkield, D. D.
Do	St. John's College	Rev. Brother Germanus, F. S. C.
FLORIDA.		
Deland	John B. Stetson University	Lincoln Hulley, Ph. D.
Gainesville	University of Florida	Andrew Sledd, Ph. D.
Winter Park	Rollins College	Rev. Wm. F. Blackman, Ph. D.
GEORGIA.		
Athens	University of Georgia	David C. Barrow, M. E., chancellor.
Atlanta	Atlanta Baptist College	John Hope, A. M.
Do	Atlanta University	Edward T. Ware, A. B.
Do	Morris Brown College	Rev. J. S. Flipper, D. D.
Do	State School of Technology	Kenneth G. Matheson, A. M., LL. D.
Bowdon	Bowdon College	V. D. Whatley.
Dahlonega	North Georgia Agricultural College	G. R. Glenn.
Macon	Mercer University	Charles L. Smith, LL. D.
Oxford	Emory College	Rev. J. E. Dickey, D. D.
South Atlanta	Clark University	W. H. Crogman, Litt. D.
Wrightsville	Warthen College	W. E. Lumley.
Young Harris	Young Harris College	Rev. Joseph A. Sharp, A. B.

III.—College Presidents—Continued.

1.—*Colleges for men, coeducational colleges of liberal arts, and schools of technology*—Continued.

Location.	University or college.	Name of president.
IDAHO.		
Moscow	University of Idaho	James A. MacLean, Ph. D.
ILLINOIS.		
Abingdon	Hedding College	Rev. Harry B. Gough, A. B.
Bloomington	Illinois Wesleyan University	Rev. Francis G. Barnes, D. D.
Bourbonnais	St. Viateur's College	Rev. John P. O'Mahoney, C. S. V., A. M.
Carlinville	Blackburn College	Walter H. Bradley, acting.
Carthage	Carthage College	Rev. Fred L. Sigmund, D. D.
Chicago	Armour Institute of Technology	Rev. Frank W. Gunsaulus, D. D.
Do	Lewis Institute	George N. Carman, A. M., director.
Do	St. Ignatius College	Rev. Alexander J. Burrowes, S. J.
Do	St. Stanislaus College	Rev. John J. Kosinski, C. R.
Do	University of Chicago	Harry Pratt Judson, LL. D.
Decatur	James Millikin University	A. R. Taylor, Ph. D.
Elmhurst	Evangelical Proseminary	Rev. Daniel Irion.
Eureka	Eureka College	Robert E. Hieronymus, A. M.
Evanston	Northwestern University	Abram W. Harris, LL. D.
Ewing	Ewing College	Rev. J. A. Leavitt, D. D.
Galesburg	Knox College	Rev. Thomas McClelland, D. D.
Do	Lombard College	Rev. Lewis B. Fisher, D. D.
Greenville	Greenville College	Eldon Grant Burritt, A. M.
Jacksonville	Illinois College	Charles H. Rammelkamp, Ph. D.
Lake Forest	Lake Forest College	John S. Nollen, Ph. D.
Lebanon	McKendree College	M. H. Chamberlin, LL. D.
Lincoln	Lincoln College	J. H. McMurray, A. M.
Monmouth	Monmouth College	Rev. Thos. H. McMichael, D. D.
Naperville	Northwestern College	Rev. H. J. Kiekhoefer, Ph. D.
Quincy	St. Francis Solanus College	Rev. Anselm Mueller, O. S. F.
Rock Island	Augustana College	Gustav A. Andreen, Ph. D.
Teutopolis	St. Joseph's College	Rev. P. Hugoline Storff, O. F. M., rector.
Upper Alton	Shurtleff College	John D. S. Riggs, L. H. D.
Urbana	University of Illinois	Edmund J. James, LL. D.
Westfield	Westfield College	Rev. Benjamin F. Daugherty, A. M.
Wheaton	Wheaton College	Rev. C. A. Blanchard, D. D.
INDIANA.		
Bloomington	Indiana University	William L. Bryan, Ph. D., LL. D.
Collegeville	St. Joseph's College	Rev. Augustine Seifert, C. PP. S.
Crawfordsville	Wabash College	George Lewes Mackintosh, D. D.
Earlham	Earlham College	Robert L. Kelly, Ph. M.
Fort Wayne	Concordia College	Rev. Martin Luecke.
Franklin	Franklin College	Elmer B. Bryan, LL. D.
Greencastle	DePauw University	Rev. E. H. Hughes, S. T. D.
Hanover	Hanover College	William A. Millis, LL. D.
Irvington	Butler College	W. E. Garrison, Ph. D.
Lafayette	Purdue University	W. E. Stone, Ph. D.
Merom	Union Christian College	O. B. Whitaker.
Moores Hill	Moores Hill College	Rev. Frank C. English, D. D.
Notre Dame	University of Notre Dame	Rev. John Cavanaugh, C. S. C.
Oakland City	Oakland City College	Wm. P. Dearing.
St. Meinrad	St. Meinrad College	Rev. A. Schmitt, O. S. B.
Terre Haute	Rose Polytechnic Institute	Carl L. Mees, Ph. D.
Upland	Taylor University	Rev. Monroe Vayhinger, A. M.
IOWA.		
Ames	Iowa College of Agriculture and Mechanic Arts.	Albert B. Storms, LL. D.
Cedar Rapids	Coe College	Wm. W. Smith, LL. D.
Charles City	Charles City College	Rev. Frank E. Hirsch, D. D.
Clinton	Wartburg College	J. Fritschel.
College Springs	Amity College	Rev. R. T. Campbell, D. D.
Decorah	Luther College	Rev. C. K. Preus.
Des Moines	Des Moines College	Loran D. Osborn, Ph. D.
Do	Drake University	Hill M. Bell, A. M., LL. D.
Dubuque	St. Joseph's College	Very Rev. Daniel M. Gorman.
Fairfield	Parsons College	Rev. W. E. Parsons, D. D.
Fayette	Upper Iowa University	Rev. W. A. Shanklin, LL. D.
Grinnell	Iowa College	J. H. T. Main, Ph. D.
Hopkinton	Lenox College	Rev. E. E. Reed, A. M., D. D.
Indianola	Simpson College	Charles E. Shelton, LL. D.
Iowa City	State University of Iowa	Geo. E. MacLean, LL. D.
Lamoni	Graceland College	David Allen Anderson.
Legrand	Palmer College	Ercy C. Kerr, A. M.
Mount Pleasant	German College	Rev. E. S. Havighorst, D. D.
Do	Iowa Wesleyan University	Rev. Edwin A. Schell.
Mount Vernon	Cornell College	Rev. Wm. F. King, LL. D.
Oskaloosa	Penn College	A. Rosenberger, A. B.
Pella	Central University of Iowa	Rev. L. A. Garrison, A. B., D. D.

III.—College Presidents—Continued.

1.—*Colleges for men, coeducational colleges of liberal arts, and schools of technology*—Continued.

Location.	University or college.	Name of president.
IOWA—cont'd.		
Sioux City	Morningside College	Rev. W. S. Lewis, D. D.
Storm Lake	Buena Vista College	Rev. Robert L. Campbell, A. M., D. D.
Tabor	Tabor College	George N. Ellis, A. M.
Toledo	Leander Clark College	Rev. Cyrus J. Kephart, D. D.
KANSAS.		
Atchison	Midland College	Rev. Millard F. Troxell, D. D.
Do	St. Benedict's College	Rt. Rev. I. Wolf, O. S. B., D. D.
Baldwin	Baker University	Rev. L. H. Murlin, D. D.
Emporia	College of Emporia	Henry Coe Culbertson, A. B., B. D.
Highland	Highland University	Geo. E. Knepper.
Holton	Campbell College	T. D. Crites.
Kansas City	Kansas City University	Rev. D. S. Stephens, D. D., chancellor.
Lawrence	University of Kansas	Frank Strong, Ph. D.
Lincoln	Kansas Christian College	
Lindsborg	Bethany College	Rev. Ernst F. Pihlblad, A. M.
McPherson	McPherson College	Edward Frantz.
Manhattan	Kansas Agricultural College	Ernest R. Nichols, A. M.
Ottawa	Ottawa University	S. E. Price.
St. Marys	St. Mary's College	Rev. Aloysius A. Breen, S. J.
Salina	Kansas Wesleyan University	Thomas W. Roach, A. M.
Sterling	Cooper College	Rev. F. M. Spencer, D. D.
Topeka	Washburn College	Frank K. Sanders.
Wichita	Fairmount College	
Do	Friends University	Edmund Stanley, A. M.
Winfield	St. John's Lutheran College	Rev. A. W. Meyer.
Do	Southwest Kansas College	F. E. Mossman, A. M.
KENTUCKY.		
Barbourville	Union College	Rev. James W. Easley, A. M.
Berea	Berea College	Rev. Wm. G. Frost, Ph. D.
Danville	Central University of Kentucky	Frederick W. Hinitt, Ph. D.
Georgetown	Georgetown College	Rev. J. J. Taylor, LL. D.
Hopkinsville	McLean College	A. C. Kuykendall, A. B.
Lexington	Transylvania University	Thomas B. McCartney, jr., M. A., Ph. D.
Do	State University	J. K. Patterson, LL. D.
Russellville	Bethel College	William H. Harrison, A. M.
St. Marys	St. Mary's College	Rev. Michael Jaglowicz, C. R.
Winchester	Kentucky Wesleyan College	H. K. Taylor, A. M.
LOUISIANA.		
Baton Rouge	Louisiana State University	Thomas D. Boyd, LL. D.
Convent	Jefferson College	Rev. R. H. Smith, S. M.
New Orleans	College of the Immaculate Conception	Rev. E. Mattern, S. J.
Do	Leland University	R. W. Perkins, Ph. D.
Do	New Orleans University	Frederic H. Knight, Ph. D.
Do	Tulane University of Louisiana	E. B. Craighead, LL. D.
MAINE.		
Brunswick	Bowdoin College	Rev. Wm. De Witt Hyde, LL.D.
Lewiston	Bates College	Rev. G. C. Chase, LL. D.
Orono	University of Maine	George E. Fellows, LL. D.
Waterville	Colby College	Rev. Charles L. White, D. D.
MARYLAND.		
Annapolis	St. John's College	Thomas Fell, LL. D.
Do	United States Naval Academy	Capt. C. J. Badger, U. S. N., superintendent.
Baltimore	Johns Hopkins University	Ira Remsen, LL. D.
Do	Loyola College	Rev. Francis X. Brady, S. J.
Do	Morgan College	Rev. John O. Spencer, Ph. D.
Chestertown	Washington College	James W. Cain, LL. D.
College Park	Maryland Agricultural College	R. W. Silvester.
Ellicott City	Rock Hill College	Rev. Brother Abraham.
Do	St. Charles College	Rev. F. X. McKenny, S. S.
Emmitsburg	Mount St. Mary's College	Very Rev. D. J. Flynn, LL. D.
New Windsor	New Windsor College	Rev. James Fraser, Ph. D.
Westminster	Western Maryland College	Rev. Thomas H. Lewis, D. D.
MASSACHUSETTS.		
Amherst	Amherst College	Rev. George Harris, LL. D.
Do	Massachusetts Agricultural College	K. L. Butterfield, A. M.
Boston	Boston College	Rev. William Gannon, S. J.
Do	Boston University	Rev. W. E. Huntington, Ph. D.
Do	Massachusetts Institute of Technology	Arthur A. Noyes, Ph. D., acting.
Cambridge	Harvard University	Charles W. Eliot, LL. D.

III.—College Presidents—Continued.

1.—*Colleges for men, coeducational colleges of liberal arts, and schools of technology*—Continued.

Location.	University or college.	Name of president.
MASSACHUSETTS—con.		
Springfield	American International College	Rev. Samuel H. Lee, A. M.
Tufts College	Tufts College	Frederick W. Hamilton, LL. D.
Williamstown	Williams College	Harry A. Garfield, LL. D.
Worcester	Clark University	G. Stanley Hall, LL. D.
Do	Collegiate Department of Clark University.	Carroll D. Wright, LL. D.
Do	College of the Holy Cross	Rev. Thomas E. Murphy, S. J.
Do	Worcester Polytechnic Institute	Edmund A. Engler, LL. D.
MICHIGAN.		
Adrian	Adrian College	Rev. B. W. Anthony, D. D.
Albion	Albion College	Samuel Dickie, LL. D.
Alma	Alma College	Rev. August F. Bruske, D. D.
Ann Arbor	University of Michigan	James B. Angell, LL. D.
Detroit	Detroit College	Rev. Richard D. Slevin, S. J.
East Lansing	Michigan Agricultural College	J. L. Snyder, Ph. D.
Hillsdale	Hillsdale College	Joseph W. Mauck, LL. D.
Holland	Hope College	Gerrit J. Kollen, LL. D.
Houghton	Michigan College of Mines	F. W. McNair, B. S.
Kalamazoo	Kalamazoo College	A. G. Slocum, LL. D.
Olivet	Olivet College	E. G. Lancaster, Ph. D.
MINNESOTA.		
Collegeville	St. John's University	Rev. P. Engel, O. S. B., Ph. D.
Minneapolis	Augsburg Seminary	Sven Oftedal.
Do	University of Minnesota	Cyrus Northrop, LL. D.
Northfield	Carleton College	Rev. Wm H. Sallmon, A. M.
Do	St. Olaf College	Rev. John N. Kildahl.
St. Paul	Hamline University	Rev. Geo. H. Bridgman, LL. D.
Do	Macalester College	Thomas M. Hodgman, A. M.
St. Peter	Gustavus Adolphus College	Rev. P. A. Mattson, B. D.
Winnebago	Parker College	Rev. E. W. Van Aken, A. M., B. D.
MISSISSIPPI.		
Agricultural College	Mississippi Agricultural and Mechanical College.	J. C. Hardy, LL. D.
Alcorn	Alcorn Agricultural and Mechanical College.	Levi J. Rowan, B. S.
Clinton	Mississippi College	Rev. Wm. T. Lowrey, D. D.
Holly Springs	Rust University	Rev. Wm. W. Foster, jr., D. D.
Jackson	Millsaps College	Rev. W. B. Murrah, LL. D.
University	University of Mississippi	A. A. Kincannon, chancellor.
MISSOURI.		
Cameron	Missouri Wesleyan College	Rev. Walter D. Agnew, A. B., S. T. B.
Canton	Christian University	Carl Johann, LL. D.
Clarksburg	Clarksburg College	F. C. Richards.
Columbia	University of Missouri	Albert Ross Hill, LL. D.
Conception	Conception College	Rt. Rev. Frowin Conrad, O. S. B.
Fayette	Central College	William A. Webb.
Fulton	Westminster College	Rev. D. R. Kerr, Ph. D.
Glasgow	Pritchett College	Hon. U. S. Hall, A. B.
Lagrange	Lagrange College	Jere T. Muir, LL. D.
Liberty	William Jewell College	Rev. J. P. Greene, LL.D.
Marshall	Missouri Valley College	Rev. Wm. H. Black, LL..D.
Morrisville	Morrisville College	Allen H. Godbey, Ph. D.
Parkville	Park College	L. M. McAfee, LL. D.
St. Louis	Christian Brothers College	Rev. Brother Justin, LL. D.
Do	St. Louis University	Rev. John P. Frieden, S. J.
Do	Washington University	David F. Houston, LL. D.
Springfield	Drury College	Joseph H. George, D. D.
Tarkio	Tarkio College	Rev. J. A. Thompson, D. D.
Warrenton	Central Wesleyan College	Rev. Geo. B. Addicks, D. D.
MONTANA.		
Bozeman	Montana College of Agriculture and Mechanic Arts.	James M. Hamilton, M. S.
Butte	Montana State School of Mines	Charles H. Bowman.
Missoula	University of Montana	C. A. Duniway.
NEBRASKA.		
Bellevue	Bellevue College	Rev. Guy W. Wadsworth, D. D.
Bethany	Cotner University	W. P. Aylsworth, LL. D.
College View	Union College	C. C. Lewis, B. S.
Crete	Doane College	Rev. David B. Perry, D. D.
Grand Island	Grand Island College	Rev Geo. Sutherland, D. D.

III.—College Presidents—Continued.

1.—*Colleges for men, coeducational colleges of liberal arts, and schools of technology*—Continued.

Location.	University or college.	Name of president.
NEBRASKA—cont'd.		
Hastings	Hastings College	Archelaus E. Turner, LL. D.
Lincoln	University of Nebraska	Rev. E. B. Andrews, LL. D., chancellor.
Omaha	Creighton University	Rev. M. P. Dowling, S. J.
University Place	Nebraska Wesleyan University	Rev. D. W. C. Huntington, LL. D., chancellor.
York	York College	Rev. Wm. E. Schell, D. D.
NEVADA.		
Reno	State University of Nevada	Rev. J. E. Stubbs, LL. D.
NEW HAMPSHIRE.		
Durham	New Hampshire College of Agriculture and Mechanic Arts.	W. D. Gibbs, M. S.
Hanover	Dartmouth College	Rev. W. J. Tucker, LL. D.
Manchester	St. Anselm's College	Rev. Leonard Walter.
NEW JERSEY.		
Hoboken	Stevens Institute of Technology	Alexander C. Humphreys, Sc. D.
Jersey City	St. Peter's College	Rev. Edward J. Magrath, S. J.
Newark	St. Benedict's College	Rev. Vincent Amberg, O. S. B.
New Brunswick	Rutgers College	Rev. Wm. H. S. Demarest, D. D.
Princeton	Princeton University	Woodrow Wilson LL. D.
South Orange	Seton Hall College	Very Rev. James F. Mooney.
NEW MEXICO.		
Agricultural College	New Mexico College of Agriculture and and Mechanic Arts.	W. E. Garrison.
Albuquerque	University of New Mexico	William G. Tight, Ph. D.
Socorro	New Mexico School of Mines	Robert P. Noble.
NEW YORK.		
Alfred	Alfred University	Rev. B. C. Davis, Ph. D.
Annandale	St. Stephen's College	Rev. Thomas R. Harris, D. D
Brooklyn	Adelphi College	C. H. Levermore, Ph. D.
Do	Polytechnic Institute of Brooklyn	F. W. Atkinson, Ph. D.
Do	St. Francis College	Brother Vincent, O. S. F.
Do	St. John's College	Very Rev. John W. Moore, C. M
Buffalo	Canisius College	Rev. Augustine A. Miller, S. J.
Canton	St. Lawrence University	Rev. Almon Gunnison, LL. D.
Clinton	Hamilton College	Rev. M. W. Stryker, LL. D.
Geneva	Hobart College	Rev. L. C. Stewardson, LL. D.
Hamilton	Colgate University	W. H. Crawshaw, acting.
Ithaca	Cornell University	J. G. Schurman, LL. D.
New York	College of St. Francis Xavier	Rev. D. W. Hearn, S. J.
Do	College of the City of New York	John H. Finley, LL. D.
Do	Columbia University	Nicholas M. Butler, LL. D.
Do	Manhattan College	Rev. Brother Peter, F. S. C.
Do	Fordham University	Rev. David J. Quinn, S. J.
Do	New York University	Rev. H. M. MacCracken, LL. D. chancellor.
Niagara University	Niagara University	Very Rev. P. J. Conroy, C. M.
Potsdam	Clarkson School of Technology	W. S. Aldrich, M. E., director.
Rochester	University of Rochester	Rev. Rush Rhees, LL. D.
St. Bonaventure	St. Bonaventure's College	Very Rev. Joseph F. Butler O. F. M.
Schenectady	Union College	Rev. A. V. V. Raymond, LL. D.
Syracuse	Syracuse University	Rev. J. R. Day, LL. D., chancellor.
Troy	Rensselaer Polytechnic Institute	Palmer C. Ricketts, C. E.
West Point	United States Military Academy	Col. Hugh L. Scott, U. S. A., supt.
NORTH CAROLINA.		
Belmont	St. Mary's College	Rev. Leo Haid, D. D., O. S. B.
Chapel Hill	University of North Carolina	F. P. Venable, LL. D.
Charlotte	Biddle University	H. L. McCrorey.
Davidson	Davidson College	Henry L. Smith, Ph. D.
Durham	Trinity College	Rev. John C. Kilgo, D. D.
Elon College	Elon College	E. L. Moffitt, LL. D.
Greensboro, N. C	Agricultural and Mechanical College for the Colored Race.	David H. Hill.
Guilford College	Guilford College	L. Lyndon Hobbs, A. M.
Hickory	Lenoir College	Rev. R. L. Fritz, A. M.
Newton	Catawba College	W. R. Weaver, dean.
Raleigh	Shaw University	Chas. F. Meserve, LL. D.
Salisbury	Livingstone College	Rev. William H. Goler, LL. D.
Wake Forest	Wake Forest College	Wm. L. Poteat, LL. D.
Weaverville	Weaverville College	Rev. L. B. Abernethy.
West Raleigh	North Carolina College of Agriculture and Mechanic Arts.	George T. Winston, LL. D.

III.—College Presidents—Continued.

1.—*Colleges for men, coeducational colleges of liberal arts, and schools of technology*—Continued.

Location.	University or college.	Name of president.
NORTH DAKOTA.		
Agricultural College	North Dakota Agricultural College	J. H. Worst, LL. D.
Fargo	Fargo College	Rev. Edmund M. Vittum, A. M., D. D.
Grand Forks	Wesley College	Edward P. Robertson, D. D.
University	University of North Dakota	Webster Merrifield, A. M.
OHIO.		
Akron	Buchtel College	Rev. A. B. Church, LL. D.
Alliance	Mount Union College	Rev. Albert B. Riker, D. D.
Ashland	Ashland College	J. L. Gillin.
Athens	Ohio University	Alston Ellis, LL. D.
Berea	Baldwin University	Rev. Robert L. Waggoner, D. D.
Do	German Wallace College	Rev. C. Riemenschneider, Ph. D.
Cedarville	Cedarville College	Rev. David McKinney, D. D.
Cincinnati	St. Xavier College	Rev. Joseph Grimmelsman.
Do	University of Cincinnati	Chas. W. Dabney, LL. D.
Cleveland	Case School of Applied Science	Charles S. Howe, Ph. D.
Do	St. Ignatius College	Rev. Geo. J. Pickel, S. J.
Do	Western Reserve University	Rev. C. F. Thwing, LL. D.
Columbus	Capital University	Rev. L. H. Schuh, Ph. D.
Do	Ohio State University	Rev. W. O. Thompson, LL. D.
Dayton	St. Mary's Institute	Rev. Louis A. Tragesser, S. M.
Defiance	Defiance College	P. W. McReynolds, A. M.
Delaware	Ohio Wesleyan University	Rev. Herbert Welch, D. D.
Findlay	Findlay College	Rev. C. I. Brown, A. M.
Gambier	Kenyon College	Rev. Wm. F. Peirce, L. H. D.
Granville	Denison University	Rev. Emory W. Hunt, LL. D.
Hiram	Hiram College	Miner Lee Bates, A. M.
Lima	Lima College	Chas. C. Miller, Ph. D.
Marietta	Marietta College	Rev. Alfred T. Perry, D. D.
New Athens	Franklin College	A. M. Campbell.
New Concord	Muskingum College	Rev. J. K. Montgomery, D. D.
Oberlin	Oberlin College	Rev. Henry C. King, D. D.
Oxford	Miami University	Rev. Guy P. Benton, D. D.
Richmond	Richmond College	Rev. G. W. MacMillan, Ph. D.
Rio Grande	Rio Grande College	Rev. J. M. Davis, Ph. D.
Scio	Scio College	R. Emory Beetham.
Springfield	Wittenberg College	Rev. Charles G. Heckert, D. D.
Tiffin	Heidelberg University	Rev. Charles E. Miller, D. D.
Westerville	Otterbein University	Louis Bookwalter.
West Lafayette	West Lafayette College	James H. Straughn.
Wilberforce	Wilberforce University	Rev. Joshua H. Jones, D. D.
Wilmington	Wilmington College	Rev. Albert J. Brown, D. D.
Wooster	University of Wooster	Rev. Louis E. Holden, LL. D.
Yellow Springs	Antioch College	S. D. Fess, LL.D.
OKLAHOMA.		
Bacone	Indian University	E. N. Collette.
Kingfisher	Kingfisher College	J. T. House, A. M.
Norman	University of Oklahoma	Rev. Arthur G. Evans.
Oklahoma City	Epworth University	Rev. Geo. H. Bradford, D. D., chancellor.
Stillwater	Oklahoma Agricultural and Mechanical College.	J. H. Connell, M. S.
Tulsa	Henry Kendall College	L. H. Beeler.
OREGON.		
Albany	Albany College	H. M. Crooks, A. B.
Corvallis	Oregon Agricultural College	W. J. Kerr.
Dallas	Dallas College	Rev. Charles A. Mock, Ph. D.
Eugene	University of Oregon	Prince L. Campbell, A. B.
Forest Grove	Pacific University	Wm. N. Ferrin, LL. D.
McMinnville	McMinnville College	Leonard W. Riley, A. B.
Newberg	Pacific College	Edwin McGrew, M. S.
Philomath	Philomath College	O. V. White, M. S., dean.
Salem	Willamette University	Fletcher Homan.
PENNSYLVANIA.		
Allentown	Muhlenberg College	Rev. J. W. A. Haas, D. D.
Annville	Lebanon Valley College	Rev. A. P. Funkhouser, A. B.
Beatty	St. Vincent College	Rev. Leander Schnerr, O. S. B.
Beaver Falls	Geneva College	Rev. W. P. Johnston, D. D.
Bethlehem	Moravian College	Rev. Aug. Schultze, L. H. D.
Carlisle	Dickinson College	Rev. G. E. Reed, LL. D.
Chester	Pennsylvania Military College	Col. C. E. Hyatt, C. E.
Collegeville	Ursinus College	Rev. A. Edwin Keigwin, D. D.
Easton	Lafayette College	Rev. E. D. Warfield, LL. D.
Gettysburg	Pennsylvania College	Rev. Samuel G. Hefelbower, A. M.

III.—College Presidents—Continued.

1.—*Colleges for men, coeducational colleges of liberal arts, and schools of technology*—Continued.

Location.	University or college.	Name of president.
PENNSYLVANIA—con.		
Grove City	Grove City College	Rev. I. C. Ketler, Ph. D.
Haverford	Haverford College	Isaac Sharpless, LL. D.
Huntingdon	Juniata College	Martin G. Brumbaugh, A. M., LL.D.
Lancaster	Franklin and Marshall College	Rev. J. S. Stahr, Ph. D.
Lewisburg	Bucknell University	John H. Harris, LL. D.
Lincoln University	Lincoln University	Rev. John B. Rendall, D. D.
Meadville	Allegheny College	Rev. Wm. H. Crawford, D. D.
Myerstown	Albright College	Rev. James D. Woodring, D. D.
New Wilmington	Westminster College	Rev. Robert M. Russell, D. D.
Philadelphia	Central High School	Rev. R. E. Thompson, S. T. D.
Do	La Salle College	Brother Wolfred.
Do	Temple University	Russell H. Conwell, LL. D.
Do	University of Pennsylvania	C. C. Harrison, LL. D., provost.
Pittsburg	Holy Ghost College	Rev. M. A. Hehir, C. S. Sp.
Do	Western University of Pennsylvania	Rev. S. B. McCormick, LL. D., chancellor.
Selinsgrove	Susquehanna University	Rev. Charles T. Aikens, A. M.
South Bethlehem	Lehigh University	Henry S. Drinker, LL. D.
State College	Pennsylvania State College	James A. Beaver, LL. D.
Swarthmore	Swarthmore College	Joseph Swain, LL. D.
Villanova	Villanova College	Rev. L. A. Delurey, O. S. A.
Volant	Volant College	C. F. Ball, A. M.
Washington	Washington and Jefferson College	Rev. J. D. Moffat, LL. D.
Waynesburg	Waynesburg College	Jacob F. Bucher, M. D.
RHODE ISLAND.		
Kingston	Rhode Island College of Agriculture and Mechanic Arts.	Howard Edwards, LL. D.
Providence	Brown University	Rev. W. H. P. Faunce, LL. D.
SOUTH CAROLINA.		
Charleston	College of Charleston	Harrison Randolph, LL. D.
Do	South Carolina Military Academy	Asbury Coward, LL. D., supt.
Clemson College	Clemson Agricultural College	P. H. Mell, Ph. D.
Clinton	Presbyterian College of South Carolina	Almon E. Spencer, vice-president.
Columbia	Allen University	Rev. Wm. D. Johnson, D. D.
Do	University of South Carolina	S. C. Mitchell, Ph. D.
Due West	Erskine College	James Strong Moffatt, D. D.
Greenville	Furman University	Rev. Edwin McNeil Poteat, D. D.
Newberry	Newberry College	James A. B. Scherer, Ph. D.
Orangeburg	Claflin University	Rev. L. M. Dunton, D. D.
Spartanburg	Wofford College	Henry N. Snyder, A. M.
SOUTH DAKOTA.		
Brookings	South Dakota Agricultural College	Robert L. Slagle, Ph. D.
Huron	Huron College	Rev. C. H. French, D. D.
Mitchell	Dakota Wesleyan University	Rev. Thomas Nicholson, D. D.
Rapid City	State School of Mines	Charles H. Fulton.
Redfield	Redfield College	
Vermilion	University of South Dakota	Franklin B. Gault.
Yankton	Yankton College	Rev. H. K. Warren, LL. D.
TENNESSEE.		
Bristol	King College	F. P. Ramsay.
Chattanooga	Chattanooga University	Rev. J. H. Race, D. D.
Clarksville	Southwestern Presbyterian University	
Jackson	Southwestern Baptist University	Rev. P. T. Hale, LL. D.
Jefferson City	Carson and Newman College	M. D. Jeffries.
Knoxville	Knoxville College	Rev. R. W. McGranahan, D. D.
Do	University of Tennessee	Brown Ayres, Ph. D.
Lebanon	Cumberland University	Nathan Green, acting.
McKenzie	Bethel College	W. E. Johnston.
Maryville	Maryville College	Rev. Samuel T. Wilson, D. D.
Memphis	Christian Brothers College	Brother Maurelian, F. S. C.
Milligan	Milligan College	Frederick D. Kershner, A. M.
Nashville	Fisk University	Rev. James G. Merrill, D. D.
Do	University of Nashville	James D. Porter, LL. D.
Do	Vanderbilt University	James H. Kirkland, LL. D., chancellor.
Do	Walden University	Rev. John A. Kumler, D. D.
Sewanee	University of the South	B. Lawton Wiggins, LL. D., vice-chancellor.
Spencer	Burritt College	W. N. Billingsley, A. M.
Sweetwater	Hiwassee College	Eugene Blake.
Tusculum	Greeneville and Tusculum College	L. C. Haynes, vice-president.
Washington College	Washington College	Rev. James T. Cooter, A. M.

III.—College Presidents—Continued.

1.—*Colleges for men, coeducational colleges of liberal arts, and schools of technology*—Continued.

Location.	University or college.	Name of president.
TEXAS.		
Austin	St. Edward's College	Rev. John T. Boland, C. S. C.
Do	University of Texas	Sidney E. Mezes.
College Station	Agricultural and Mechanical College of Texas.	Henry H. Harrington.
Brownwood	Howard Payne College	John H. Humphreys, acting.
Fort Worth	Fort Worth University	Rev. William Fielder, D. D.
Do	Polytechnic College	Rev. H. A. Boaz, A. M.
Galveston	St. Mary's University	Rev. A. E. Otis, S. J.
Georgetown	Southwestern University	Robert S. Hyer, LL. D.
Greenville	Burleson College	W. I. Gibson, A. M.
Marshall	Wiley University	Rev. M. W. Dogan, Ph. D.
North Waco	Texas Christian University	Clinton Lockhart, Ph. D.
Sherman	Austin College	Rev. Thomas S. Clyce, D. D.
Waco	Baylor University	Samuel P. Brooks, LL. D.
Do	Paul Quinn College	Rev. William J. Laws, D. D.
Waxahachie	Trinity University	
UTAH.		
Logan	Agricultural College of Utah	John A. Widtsoe.
Do	Brigham Young College	James H. Linford, B. S.
Salt Lake City	University of Utah	Joseph T. Kingsbury, Ph. D.
Do	Westminster College	Rev. M. H. Stevenson.
VERMONT.		
Burlington	University of Vermont	Rev. M. H. Buckham, LL. D.
Middlebury	Middlebury College	John Martin Thomas, D. D.
Northfield	Norwich University	Charles H. Spooner, LL. D.
VIRGINIA.		
Ashland	Randolph-Macon College	Robert E. Blackwell, LL. D.
Blacksburg	Virginia Agricultural and Mechanical College and Polytechnic Institute.	P. B. Barringer, LL. D.
Bridgewater	Bridgewater College	W. B. Yount, Ph. B.
Charlottesville	University of Virginia	E. A. Alderman, LL. D.
Emory	Emory and Henry College	Rev. R. G. Waterhouse, D. D.
Fredericksburg	Fredericksburg College	Rev. J. W. Rosebro, D. D., acting.
Hampden-Sidney	Hampden-Sidney College	Rev. James G. McAllister, D. D.
Lexington	Virginia Military Institute	Edward W. Nichols, supt.
Do	Washington and Lee University	George H. Denny, Ph. D.
Lynchburg	Virginia Christian College	Joseph Hopwood, A. M.
Richmond	Richmond College	F. W. Boatwright, LL. D.
Do	Virginia Union University	Rev. George R. Hovey, D. D.
Salem	Roanoke College	Rev. John A. Morehead, D. D.
Williamsburg	College of William and Mary	L. G. Tyler, LL. D.
WASHINGTON.		
Pullman	State College of Washington	E. A. Bryan, LL. D.
Seattle	University of Washington	Thomas F. Kane, Ph. D.
Spokane	Gonzaga College	Rev. H. J. Goller, S. J.
Tacoma	University of Puget Sound	Lee L. Benbow.
Do	Whitworth College	Rev. Borend H. Kroeze, D. D.
Walla Walla	Whitman College	Rev. S. B. L. Penrose, A. B.
WEST VIRGINIA.		
Barboursville	Morris Harvey College	D. W. Shaw, A. M.
Bethany	Bethany College	T. E. Cramblet, A. M., LL. D.
Buckhannon	Wesleyan University	Carl G. Doney, Ph. D.
Elkins	Davis and Elkins College	M. C. Allaben, A. B.
Morgantown	West Virginia University	D. B. Purinton, LL. D.
WISCONSIN.		
Appleton	Lawrence University	Rev. S. Plantz, Ph. D.
Beloit	Beloit College	Rev. Edward D. Eaton, LL. D.
Madison	University of Wisconsin	Charles R. Van Hise, Ph. D.
Milton	Milton College	Rev. Wm. C. Daland, D. D.
Milwaukee	Concordia College	Rev. M. J. F. Albrecht.
Do	Marquette College	Rev. James McCabe, S. J.
Plymouth	Mission House	Rev. H. A. Meier, D. D.
Ripon	Ripon College	Rev. Richard C. Hughes, D. D.
Watertown	Northwestern University	Rev. A. F. Ernst.
Waukesha	Carroll College	Rev. W. O. Carrier, D. D.
WYOMING.		
Laramie	University of Wyoming	Charles O. Merica, LL. D.

III.—College Presidents—Continued.

2.—*Colleges for women.*

Location.	College.	Name of president.
ALABAMA.		
Athens	Athens Female College	Miss Mary N. Moore.
Eufaula	The Alabama Brenau	A. W. Van Hoose; H. J. Pearce.
Marion	Judson College	Rev. Robert G. Patrick, D. D.
Do	Marion Female Seminary	Rev. L. W. Brown.
Talladega	Alabama Synodical College for Women	Rev. T. Peyton Walton.
Tuscaloosa	Central Female College	Rev. B. F. Giles, A. M.
Do	Tuscaloosa Female College	R. J. Holston, A. M.
Tuskegee	Alabama Conference Female College	John Massey, LL. D.
ARKANSAS.		
Conway	Central Baptist College	W. W. Rivers, A. M.
CALIFORNIA.		
Mills College	Mills College	Mrs. Susan L. Mills.
San Jose	College of Notre Dame	Sister Mary Bernardine.
DISTRICT OF COLUMBIA.		
Washington	Trinity College	Sister Julia.
FLORIDA.		
Tallahassee	Florida Female College	A. A. Murphree.
GEORGIA.		
Athens	Lucy Cobb Institute	Mildred Lewis Rutherford.
College Park	Cox College	John W. Gaines.
Cuthbert	Andrew Female College	J. W. Malone.
Dalton	Dalton Female College	Geo. S. Fulton.
Decatur	Agnes Scott College	Rev. F. H. Gaines, D. D.
Forsyth	Monroe Female College	C. H. S. Jackson, A. M.
Gainesville	Brenau College	A. W. Van Hoose; H. J. Pearce.
Lagrange	Lagrange Female College	Rufus W. Smith, A. M.
Do	Southern Female College	M. W. Hatton, A. M.
Macon	Wesleyan Female College	Du Pont Guerry.
Rome	Shorter College	T. J. Simmons, A. M.
ILLINOIS.		
Jacksonville	Illinois Woman's College	Rev. Joseph R. Harker, Ph. D.
Knoxville	St. Mary's School	Rev. C. W. Leffingwell, D.D., rector.
Rockford	Rockford College	Julia H. Gulliver, Ph. D.
INDIANA.		
Notre Dame	St. Mary's College and Academy	Mother M. Pauline.
KANSAS.		
Topeka	College of the Sisters of Bethany	Rev. F. R. Millspaugh, D. D.
KENTUCKY.		
Bowling Green	Potter College	Rev. Benj. F. Cabell, D. D.
Danville	Caldwell College	John C. Acheson, A. M.
Glasgow	Liberty College	Robert E. Hatton, Ph. D.
Harrodsburg	Beaumont College	Th. Smith, A. M.
Hopkinsville	Bethel Female College	Rev. Edmund Harrison, LL. D.
Lexington	Hamilton Female Institute	Mrs. L. W. St. Clair.
Do	Sayre Female Institute	Rev. J. M. Spencer.
Millersburg	Millersburg Female College	Rev. C. C. Fisher, A. M.
Nicholasville	Jessamine Female Institute	H. H. Savage, A. B.
Owensboro	Owensboro Female College	J. Byron La Rue.
Russellville	Logan Female College	B. E. Atkins, A. M.
Versailles	Margaret College	Thomas C. Walton, Ph. D.
LOUISIANA.		
Clinton	Silliman Collegiate Institute	Rev. H. H. Brownlee.
Keatchie	Louisiana Female College	G. W. Thigpen, A. M.
Mansfield	Mansfield Female College	T. S. Sligh, A. M.
New Orleans	H. Sophie Newcomb Memorial College	Brandt V. B. Dixon, LL. D.
MARYLAND.		
Baltimore	Woman's College of Baltimore	Eugene A. Noble.
Frederick	Woman's College	J. H. Apple, A. M.
Hagerstown	Kee Mar College	Page Milburn.
Lutherville	Maryland College for Young Ladies	Rev. J. H. Turner, D. D.

III.—College Presidents—Continued.

2.—*Colleges for women*—Continued.

Location.	College.	Name of president.
MASSACHUSETTS.		
Auburndale	Lasell Seminary for Young Women	C. C. Bragdon, LL. D.
Boston	Simmons College	Henry Lefavour, LL. D.
Cambridge	Radcliffe	Le Baron R. Briggs, LL. D.
Northampton	Smith College	Rev. L. Clark Seelye, LL. D.
South Hadley	Mount Holyoke College	Mary E. Woolley, Litt. D.
Wellesley	Wellesley College	Miss Caroline Hazard, Litt. D.
MISSISSIPPI.		
Blue Mountain	Blue Mountain Female College	B. G. Lowrey, A. M.
Brookhaven	Whitworth Female College	Rev. I. W. Cooper, D. D.
Clinton	Hillman College	W. J. Lowrey.
Columbus	Industrial Institute and College	Henry L. Whitfield.
French Camp	Central Mississippi Institute	J. A. Sanderson, principal.
Jackson	Belhaven College for Young Ladies	J. R. Preston.
Meridian	Meridian Female College	J. W. Beeson, A. M.
Natchez	Stanton College for Young Ladies	J. K. Morrison.
Pontotoc	Chickasaw Female College	Miss Katherine E. Crawford.
Port Gibson	Port Gibson Female College	Henry G. Hawkins, A. B.
MISSOURI.		
Columbia	Christian College	Mrs. W. T. Moore.
Do	Stephens College	William B. Peeler.
Fayette	Howard Payne College	Rev. Henry E. Stout.
Fulton	Synodical Female College	Rev. C. A. McPheeters, A. M.
Do	Central Female College	Alfred F. Smith.
Lexington	Lexington College for Young Women	Edward W. White, A. M.
Liberty	Liberty Ladies College	C. M. Williams, A. M.
Mexico	Hardin College	J. W. Million, A. M.
Nevada	Cottey College for Young Ladies	Mrs. V. A. C. Stockard.
St. Charles	Lindenwood College for Women	Rev. George F. Ayres, Ph. D.
NEW YORK.		
Aurora	Wells College	Rev. George M. Ward, LL. D.
Elmira	Elmira College	Rev. A. C. Mackenzie, LL. D.
New Rochelle	College of St. Angela	Rev. M. C. O'Farrell.
New York	Barnard College	Wm. T. Brewster, acting dean.
Poughkeepsie	Vassar College	Rev. J. M. Taylor, LL. D.
NORTH CAROLINA.		
Charlotte	Elizabeth College	Rev. C. B. King, A. M.
Greensboro	Greensboro Female College	Mrs. Lucy H. Robertson.
Hickory	Claremont Female College	Joseph L. Murphy.
Louisburg	Louisburg Female College	Mrs. Mary Davis Allen.
Murfreesboro	Chowan Baptist Female Institute	John C. Scarborough, A. B.
Oxford	Oxford Female Seminary	F. P. Hobgood, A. M.
Raleigh	Baptist Female University	Rev. R. T. Vann, D. D.
Salem	Salem Female Academy and College	Rev. John H. Clewell, Ph. D.
Statesville	Statesville Female College	Rev. John A. Scott, D. D.
OHIO.		
Oxford	Oxford College	Jane Sherzer, Ph. D.
Do	Western College for Women	Rev. John G. Newman, D. D.
Painesville	Lake Erie College	Miss Mary Evans, Litt. D.
PENNSYLVANIA.		
Allentown	Allentown College for Women	Rev. Thomas S. Land.
Beaver	Beaver College	Rev. George D. Chrissman, Ph. D.
Bethlehem	Moravian Seminary and College for Women.	Rev. J. Max Hark, D. D.
Blairsville	Blairsville College	Rev. N. S. Fiscus, B. D.
Bryn Mawr	Bryn Mawr College	Miss M. Carey Thomas, LL. D.
Chambersburg	Wilson College	M. H. Reaser, Ph. D.
Mechanicsburg	Irving Female College	E. E. Campbell, Ph. D.
Pittsburg	Pennsylvania College for Women	Rev. Henry D. Lindsay, D. D.
SOUTH CAROLINA.		
Columbia	Columbia Female College	Rev. W. W. Daniel, D. D.
Do	College for Women	Miss Euphemia McClintock, A. B
Due West	Due West Female College	Rev. James Boyce.
Greenville	Greenville College for Women	A. S. Townes.
Do	Greenville Female College	Edward C. James, Litt. D.
Greenwood	Lander Female College	Rev. John O. Willson, D. D.
Spartanburg	Converse College	Robert P. Pell, A. B.
Union	Clifford Seminary	Rev. B. G. Clifford, Ph. D.

III.—College Presidents—Continued.

2.—*Colleges for women*—Continued.

Location.	College.	Name of president.
TENNESSEE.		
Bristol	Sullins College	W. E. Martin, Ph. D., A. M.
Franklin	Tennessee Female College	T. E. Allen.
Gallatin	Howard Female College	Amos L. Edwards, B. S.
Jackson	Memphis Conference Female Institute	Rev. A. B. Jones, LL. D.
Murfreesboro	Tennessee College	Geo. J. Burnett, A. M.
Nashville	Boscobel College	Mrs. J. O. Rust.
Do	Ward Seminary	J. D. Blanton, LL. D.
Rogersville	Synodical Female College	Lawrence Rolfe, A. B.
TEXAS.		
Bonham	Carlton College	Rev. C. T. Carlton, A. B.
Belton	Baylor Female College	W. A. Wilson, D. D.
Chappell Hill	Chappell Hill Female College	James E. Willis, A. M.
San Antonio	San Antonio Female College	Rev. J. E. Harrison, A. B.
Sherman	North Texas Female College	Mrs. Lucy A. Kidd Key.
VIRGINIA.		
Abingdon	Martha Washington College	S. D. Long.
Do	Stonewall Jackson Institute	Miss Kate M. Hunt, A. B.
Bristol	Southwest Virginia Institute	J. T. Henderson, A. M.
Charlottesville	Rawlings Institute	Rev. H. W. Tribble, D. D.
Danville	Roanoke College of Danville	John B. Brewer, A. M.
Hollins	Hollins Institute	Miss Matty L. Cocke.
Lynchburg	Randolph-Macon Woman's College	W. W. Smith, LL. D.
Marion	Marion Female College	Rev. J. J. Scherer, D. D.
Petersburg	Southern Female College	Arthur K. Davis, A. M.
Richmond	Woman's College	Rev. James Nelson, D. D.
Winchester	Episcopal Institute	W. C. Marshall, principal.
WEST VIRGINIA.		
Charlestown	Powhatan College	Stewart P. Hatton, LL. D.
Lewisburg	Lewisburg Female Institute	Rev. R. L. Telford, D. D.
WISCONSIN.		
Milwaukee	Milwaukee-Downer College	Miss Ellen C. Sabin, A. M.

IV.—Professors of Pedagogy and Heads of Departments of Pedagogy in Universities and Colleges.

Address.	University or college.	Name of professor.
University, Ala	University of Alabama	Fletcher B. Dresslar, Ph. D.
Fayetteville, Ark	University of Arkansas	Wm. S. Johnson, Ph. D.
Berkeley, Cal	University of California	A. F. Lange, Ph. D.
Pasadena, Cal	Throop Polytechnic Institute	A. H. Chamberlain, A. M.
Stanford University, Cal.	Leland Stanford Junior University	E. P. Cubberley, A. M.
Boulder, Colo	University of Colorado	Vivian A. C. Henmon, Ph. D.
Colorado Springs, Colo.	Colorado College	H. A. Ruger, A. B.
University Park, Colo.	University of Denver	D. E. Phillips, Ph. D.
Washington, D. C	George Washington University	Williston S. Hough, Ph. M.
Do	Howard University	Lewis B. Moore, Ph. D.
De Land, Fla	John B. Stetson University	Lincoln Hulley, Ph. D., president.
Gainesville, Fla	University of the State of Florida	W. F. Yocum, D. D.
Athens, Ga	University of Georgia	T. J. Woofter, Ph. D.
Atlanta, Ga	Atlanta University	George A. Towns, A. M.
Dahlonega, Ga	North Georgia Agricultural College	Gustavus R. Glenn, LL. D., pres.
South Atlanta, Ga	Clark University	Arthur W. Rowell.
Moscow, Idaho	University of Idaho	M. F. Reed, B. S.
Chicago, Ill	University of Chicago	Nathaniel Butler, LL. D.
Decatur, Ill	James Milliken University	A. R. Taylor, Ph. D., president.
Eureka, Ill	Eureka College	Elizabeth Baxter, A. B.
Evanston, Ill	Northwestern University	Herbert F. Fisk, LL. D.
Greenville, Ill	Greenville College	Candis J. Nelson, A. B.
Urbana, Ill	University of Illinois	W. C. Bagley, Ph. D.
Bloomington, Ind	Indiana University	Wm. W. Black, A. M.
Crawfordsville, Ind.	Wabash College	Geo. H. Tapy, A. B.
Earlham, Ind	Earlham College	Robt. L. Kelly, president.

IV.—Professors of Pedagogy and Heads of Departments of Pedagogy in Universities and Colleges—Continued.

Address.	University or college.	Name of professor.
Greencastle, Ind.	De Pauw University	Rufus B. Von Kleinsmid, A. M.
Hanover, Ind.	Hanover College	Wm. A. Millis, president.
Indianapolis, Ind.	Butler College	Arthur K. Rogers, Ph. D.
Moores Hill, Ind.	Moores Hill College	Frederick L. Fagley, B. S.
Oakland City, Ind.	Oakland City College	Newton C. Johnson.
Cedar Rapids, Iowa	Coe College	J. P. Hugget, A. M.
Charles City, Iowa	Charles City College	Frederick Schaub, A. M.
Des Moines, Iowa	Drake University	William F. Barr, Ph. D.
Fairfield, Iowa	Parsons College	Katharine I. Hutchison, A. M.
Fayette, Iowa	Upper Iowa University	A. E. Bennett, A. M.
Indianola, Iowa	Simpson College	Charles E. Shelton, LL. D., pres.
Iowa City, Iowa	State University of Iowa	F. E. Bolton, Ph. D.
Lamoni, Iowa	Graceland College	R. M. Stewart, A. B.
Mount Pleasant, Iowa	Iowa Wesleyan University	Elizabeth Dean.
Mount Vernon, Iowa	Cornell College	Hugh S. Buffum.
Sioux City, Iowa	Morningside College	E. A. Brown, A. M.
Tabor, Iowa	Tabor College	J. F. Crawford, A. M.
Atchison, Kans.	Midland College	Harold W. Foght, A. M.
Baldwin, Kans.	Baker University	Lilian Scott, Ph. B.
Emporia, Kans.	Emporia College	Mary A. Ludlum, A. M.
Holton, Kans.	Campbell College	W. S. Reese, Ph. M.
Lawrence, Kans.	University of Kansas	A. S. Olin, A. M.
Lindsborg, Kans.	Bethany College	
McPherson, Kans.	McPherson College	John A. Clement, A. M.
Ottawa, Kans.	Ottawa University	Herbert H. Foster, Ph. D.
Salina, Kans.	Kansas Wesleyan University	Albert H. King, M. Ped.
Sterling, Kans.	Cooper College	Elizabeth Duff.
Topeka, Kans.	Washburn College	Emil C. Wilm, Ph. D.
Wichita, Kans.	Fairmount College	Herbert L. Wilbur, A. M.
Do	Friends University	B. W. Truesdell, A. B.
Winfield, Kans.	Southwest Kansas College	Henrietta V. Race, A. B.
Barbourville, Ky.	Union College	George H. Reibold, B. S.
Berea, Ky.	Berea College	John W. Dinsmore, A. M.
Lexington, Ky.	State University	James T. Noe, A. M.
Baton Rouge, La.	Louisiana State University	Alexander B. Coffey, dean.
New Orleans, La.	H. Sophie Newcomb Memorial College	Margaret E. Cross.
Do	Leland University	R. W. Perkins, Ph. D.
Do	Tulane University of Louisiana	Joseph M. Gwinn, A. M.
Orono, Me.	University of Maine	Chas. Davidson, Ph. D.
Baltimore, Md.	Morgan College	Chas. A. Johnson, A. B.
Chestertown, Md.	Washington College	Robt. H. Gault, Ph. D.
Boston, Mass.	Simmons College	Mary E. Parker, A. M.
Cambridge, Mass.	Harvard University	Paul H. Hanus, B. S., LL. D.
South Hadley, Mass.	Mount Holyoke College	George E. Dawson, Ph. D.
Wellesley, Mass.	Wellesley College	Anna J. McKeag, Ph. D.
Worcester, Mass.	Clark University	W. H. Burnham, Ph. D.
Do.	Collegiate Department, Clark University.	Rufus C. Bentley, A. M., dean.
Adrian, Mich.	Adrian College	Sarah J. Knott, M. S.
Alma, Mich.	Alma College	Albert P. Cook.
Ann Arbor, Mich.	University of Michigan	Alien S. Whitney, A. B.
Hillsdale, Mich.	Hillsdale College	Charles H. Gurney, A. M.
Holland, Mich.	Hope College	John E. Knizenga, A. M.
Kalamazoo, Mich.	Kalamazoo College	Herbert L. Stetson, LL. D.
Olivet, Mich.	Olivet College	E. G. Lancaster, Ph. D., president.
Minneapolis, Minn.	University of Minnesota	George F. James, Ph. D.
St. Paul, Minn.	Macalester College	Andrew W. Anderson, A. M
St. Peter, Minn.	Gustavus Adolphus College	Emil O. Chelgren, A. B.
Winnebago, Minn.	Parker College	Elbert Wayland Van Aken, A. M., president.
University, Miss.	University of Mississippi	Thos. P. Bailey, Ph. D.
Columbia, Mo.	University of Missouri	J. L. Meriam, Ph. D.
St. Louis, Mo.	Washington University	Edgar J. Swift, Ph. D.
Missoula, Mont.	University of Montana	Wm. F. Book, Ph. D.
Bellevue, Nebr.	Bellevue College	Wm. C. T. Adams, Ph D.
Bethany, Nebr.	Cotner University	Jas. A. Beattie, LL. D.
College View, Nebr.	Union College	Charles C. Lewis, president.
Grand Island, Nebr.	Grand Island College	John L. Beyl, Ph. D.
Hastings, Nebr.	Hastings College	Albert G. Owen, A. M.
Lincoln, Nebr.	University of Nebraska	Charles Fordyce, Ph. D., dean.
University Place, Nebr	Nebraska Wesleyan University	Wm. R. Jackson, A. M.
York, Nebr.	York College	M. Lillie Irwin, B. S.
Reno, Nev.	University of Nevada	Romanzo Adams, Ph. M.
Hanover, N. H.	Dartmouth College	Franklin C. Lewis, A. M.
New Brunswick, N. J.	Rutgers College	E. R. Payson, Ph. D.
Albuquerque, N. Mex.	University of New Mexico	Charles E. Hodgin, B. Ped.
Alfred, N. Y.	Alfred University	Charles B. Clark, A. M.
Brooklyn, N. Y.	Adelphi College	E. N. Henderson, A. M.
Do	Polytechnic Institute of Brooklyn	Fred W. Atkinson, Ph. D.
Canton, N. Y.	St. Lawrence University	F. C. Foster, A. M., acting.
Clinton, N. Y.	Hamilton College	W. H. Squires, Ph. D.
Elmira, N. Y.	Elmira College	Vida F. Moore, Ph. D.

IV.—Professors of Pedagogy and Heads of Departments of Pedagogy in Universities and Colleges—Continued.

Address.	University or college.	Name of professor.
Hamilton, N. Y.	Colgate University	M. S. Read, Ph. D.
Ithaca, N. Y.	Cornell University	Charles De Garmo, Ph. D.
New York, N. Y.	College of the City of New York	Stephen P. Duggan, Ph. D.
Do	Columbia University (Teachers College)	James E. Russell, LL. D., dean.
Do	New York University	T. M. Balliet, Ph. D.
Rochester, N. Y.	University of Rochester	George M. Forbes, A. M.
Syracuse, N. Y.	Syracuse University	J. R. Street, Ph. D.
Chapel Hill, N. C.	University of North Carolina	Marcus C. S. Noble.
Salisbury, N. C.	Livingstone College	W. R. Connors, A. B.
Wake Forest, N. C.	Wake Forest College	J. Henry Highsmith.
University, N. Dak.	University of North Dakota	Joseph Kennedy, A. M.
Alliance, Ohio	Mount Union College	John B. Bowman, A. M.
Ashland, Ohio	Ashland College	L. Leedy Garber, A. M.
Athens, Ohio	Ohio University	Henry G. Williams, A. M.
Berea, Ohio	Baldwin University	Fletcher D. Ward, B. S.
Cincinnati, Ohio	University of Cincinnati	Wm. P. Burris, A. M., dean.
Columbus, Ohio	Ohio State University	Frank P. Graves, Ph. D.
New Athens, Ohio	Muskingum College	John G. Lowery.
Oberlin, Ohio	Oberlin College	Edward A. Miller, A. B.
Oxford, Ohio	Miami University	Harvey C. Minnich, A. M.
Tiffin, Ohio	Heidelberg University	Aaron W. Ricksecker, A. B.
Westerville, Ohio	Otterbein University	Thomas J. Sanders, Ph. D.
Wilberforce, Ohio	Wilberforce University	Sarah C. B. Scarborough, M. Pd.
Yellow Springs, Ohio	Antioch College	W. W. Weaver, A. M.
Eugene, Oreg	University of Oregon	H. D. Shelden, Ph. D.
Salem, Oreg	Willamette University	Mary E. Reynolds, B. S.
Allegheny, Pa.	Western University of Pennsylvania	E. B. Huey, Ph. D.
Allentown, Pa.	Muhlenberg College	G. T. Ettinger, Ph. D.
Carlisle, Pa.	Dickinson College	Wm. L. Gooding, Ph. D.
Collegeville, Pa.	Ursinus College	Geo. L. Omwake, A. M., dean.
Bryn Mawr, Pa.	Bryn Mawr College	James H. Leuba, Ph. D.
Grove City, Pa.	Grove City College	C. M. Thomas, Ph. D.
Huntingdon, Pa.	Juniata College	J. H. Brumbaugh.
Lewisburg, Pa.	Bucknell University	Thomas A. Edwards, A. M.
Philadelphia, Pa.	Central High School	Francis B. Brandt, Ph. D.
Do	Temple University	Herbert Stotesbury, Ph. D.
Do	University of Pennsylvania	A. D. Yocum, Ph. D.
Selinsgrove, Pa.	Susquehanna University	William Noetling, A. M.
Providence, R. I.	Brown University	W. B. Jacobs, A. M.
Columbia, S. C.	University of South Carolina	Patterson Wardlaw, A. B.
Orangeburg, S. C.	Claflin University	G. Le Roy Noyes, A. B.
Brookings, S. Dak.	South Dakota Agricultural College	Rufus B. McClenon, A. M.
Mitchell, S. Dak.	Dakota Wesleyan University	Samuel Weir, Ph. D.
Vermilion, S. Dak.	University of South Dakota	A. W. Trettien.
Yankton, S. Dak.	Yankton College	Henry K. Warren, LL. D.
Knoxville, Tenn.	University of Tennessee	P. P. Claxton, A. M.
Nashville, Tenn.	University of Nashville	Albert T. Barrett, LL. D.
Austin, Tex.	University of Texas	W. S. Sutton, A. M.
Waco, Tex.	Baylor University	Frederick Eby, Ph. D.
Logan, Utah	Brigham Young College	Daniel C. Jensen, A. B.
Salt Lake City, Utah	University of Utah	Wm. M. Stewart, M. Di.
Charlottesville, Va.	University of Virginia	Wm. H. Heck, A. M.
Emory, Va.	Emory and Henry College	J. P. McConnell, Ph. D., acting.
Lynchburg, Va.	Randolph-Macon Woman's College	Wilmot B. Lane, Ph. D.
Salem, Va.	Roanoke College	F. V. N. Painter, A. M.
Williamsburg, Va.	College of William and Mary	
Pullman, Wash.	State College of Washington	Hiram C. Sampson, A. B.
Seattle, Wash.	University of Washington	Edward O Sisson, Ph. D.
Tacoma, Wash.	University of Puget Sound	B. E. McProud, A. M.
Morgantown, W. Va.	West Virginia University	Jasper N. Deahl, A. M.
Beloit, Wis.	Beloit College	Almon W. Burr, A. M.
Madison, Wis.	University of Wisconsin	M. Vincent O'Shea, B. L.
Ripon, Wis.	Ripon College	Wm. J. Mutch, Ph. D.
Waukesha, Wis.	Carroll College	Samuel B. Ray, A. M.
Laramie, Wyo.	University of Wyoming	John Franklin Brown, Ph. D.

V.—Principals of Normal Schools.

1.—*Public normal schools.*

Location.	Name of institution.	Principal.
ALABAMA.		
Falkville	Falkville Normal College	Henry T. Lile.
Florence	State Normal College	Marshall C. Wilson.
Jacksonville	do	C. W. Daugette.
Livingston	Alabama Normal College for Girls	Miss Julia S. Tutwiler.
Normal	Agricultural and Mechanical College for Negroes.	W. H. Council.
Troy	State Normal College	E. M. Shackelford.
ARIZONA.		
Flagstaff	Northern Arizona Normal School	A. N. Taylor.
Tempe	Tempe Normal School of Arizona	A. J. Matthews.
ARKANSAS.		
Pine Bluff	Branch Normal College (colored)	Isaac Fisher
CALIFORNIA.		
Chico	California State Normal School	Chas. C. Van Liew.
Los Angeles	State Normal School	Jesse F. Millspaugh.
San Diego	do	Samuel T. Black.
San Francisco	do	Frederick Burk.
San Jose	do	Morris Elmer Dailey.
COLORADO.		
Greeley	Colorado State Normal School	Z. X. Snyder.
CONNECTICUT.		
Bridgeport	Bridgeport Training School	Besse E. Howes.
Danbury	State Normal School	John R. Perkins.
New Britain	Normal Training School	Marcus White.
New Haven	State Normal Training School	Arthur B. Morrill.
Willimantic	do	Henry T. Burr.
DELAWARE.		
Wilmington	Wilmington Teachers Training School	Clara Mendenhall.
DISTRICT OF COLUMBIA.		
Washington	Washington Normal School No. 1	Anne M. Goding.
Do	Washington Normal School No. 2 (colored)	Lucy E. Moten.
FLORIDA.		
Tallahassee	Florida State Normal and Industrial College (colored).	Nathan B. Young.
GEORGIA.		
Athens	State Normal School	E. C. Branson.
Douglas	Southern Normal Institute	J. Walter Hendricks.
Milledgeville	Georgia Normal and Industrial College	M. M. Parks.
Savannah	State Industrial College (colored)	R. R. Wright.
IDAHO.		
Albion	State Normal School	G. A. Axline.
Lewiston	do	Geo. H. Black.
ILLINOIS.		
Carbondale	Southern Illinois State Normal University	D. B. Parkinson.
Charleston	Eastern Illinois State Normal School	L. C. Lord.
Chicago, Station O	Chicago Normal School	Ella Flagg Young.
De Kalb	Northern Illinois State Normal School	John W. Cook.
Macomb	Western Illinois State Normal School	Alfred Bayliss.
Normal	Illinois State Normal University	David Felmley.
INDIANA.		
Indianapolis	Indianapolis Normal School	M. E. Nicholson.
Terre Haute	Indiana State Normal School	William W. Parsons.
IOWA.		
Cedar Falls	Iowa State Normal School	Homer H. Seerley.
Woodbine	Woodbine Normal and Commercial School	M. A. Reed.
KANSAS.		
Emporia	State Normal School	Joseph H. Hill.
Hays	Western Branch State Normal School	William S. Picken.
Pittsburg	State Manual Training Normal School	R. S. Russ.

V.—Principals of Normal Schools—Continued.

1.—*Public normal schools*—Continued.

Location.	Name of institution.	Principal.
KENTUCKY.		
Bowling Green	Western Kentucky State Normal School	H. H. Cherry.
Frankfort	State Normal and Industrial Institute for Colored Persons.	John H. Jackson.
Louisville	Louisville Normal School	W. J. McConathy.
Richmond	Eastern Kentucky State Normal School	R. N. Roark.
LOUISIANA.		
Natchitoches	Louisiana State Normal School	B. C. Caldwell.
New Orleans	New Orleans Normal School	Miss Margaret C. Hanson.
MAINE.		
Castine	Eastern State Normal School	Albert F. Richardson.
Farmington	Farmington State Normal School	George C. Purington.
Fort Kent	Madawaska Training School	Mary P. Nowland.
Gorham	State Normal School	Walter E. Russell.
Lee	Lee Normal Academy	Albert A. Towne.
Springfield	Springfield Normal School	Florence A. Parker.
MARYLAND.		
Baltimore	Baltimore Normal School for Education of Colored Teachers.	Geo. Harrison.
Do	Baltimore Teachers Training School	Sarah C. Brooks.
Do	Maryland State Normal School	Geo. W. Ward.
Frostburg	do	Edward D. Murdaugh.
MASSACHUSETTS.		
Boston	Boston Normal School	Wallace C. Boyden.
Do	Massachusetts Normal Art School	George H. Bartlett.
Bridgewater	State Normal School	Albert G. Boyden.
Fitchburg	do	John G. Thompson.
Framingham	do	Henry Whittemore.
Hyannis	do	Wm. A. Baldwin.
Lowell	do	Cyrus A. Durgin.
Do	Training School for Teachers	Gertrude Edmund.
North Adams	State Normal School	F. F. Murdock.
Salem	do	Joseph Asbury Pitman.
Westfield	do	Clarence A. Brodeur.
Worcester	do	E. Harlow Russell.
MICHIGAN.		
Detroit	Washington Normal School	Chas. L. Spain.
Kalamazoo	Western State Normal School	Dwight B. Waldo.
Marquette	State Normal School	James H. B. Kaye
Mount Pleasant	Central State Normal School	Chas. T. Grawn.
Ypsilanti	Michigan State Normal School	Lewis H. Jones.
MINNESOTA.		
Duluth	State Normal School	E. W. Bohannon.
Mankato	do	Chas. H. Cooper.
Moorhead	do	Frank A. Weld.
St. Cloud	do	W. A. Shoemaker.
St. Paul	Teachers Training School	Hiram W. Slack.
Winona	State Normal School	G. E. Maxwell.
MISSISSIPPI.		
Sherman	Mississippi Normal Institute	John B. Thompson.
Walnut Grove	Mississippi Central Normal School	John Rundle.
MISSOURI.		
Cape Girardeau	State Normal School	W. S. Dearmont.
Kirksville	State Normal School (first district)	John R. Kirk.
Maryville	State Normal School	Homer M. Cook.
St. Louis	Teachers College	John W. Withers.
Warrensburg	State Normal School (second district)	W. J. Hawkins.
MONTANA.		
Dillon	Montana Normal School	Henry H. Swain.
NEBRASKA.		
Kearney	State Normal School	A. O. Thomas.
Peru	Nebraska State Normal School	J. W. Crabtree.
NEW HAMPSHIRE.		
Plymouth	State Normal School	J. E. Klock.

V.—Principals of Normal Schools—Continued.

1.—*Public normal schools*—Continued.

Location.	Name of institution.	Principal.
NEW JERSEY.		
Jersey City	Teachers Training School	Joseph H. Brensinger.
Newark	Newark Normal and Training School	W. S. Willis.
Paterson	Paterson Normal Training School	Frank W. Smith.
Trenton	New Jersey State Normal and Model Schools	James M. Green.
NEW MEXICO.		
Las Vegas	New Mexico Normal University	W. E. Garrison.
Silver City	Normal School of New Mexico	C. M. Light.
NEW YORK.		
Albany	New York State Normal College	Wm. J. Milne.
Do	Teachers Training School	J. D. Burks.
Auburn	Auburn Training School	Miss M. Blanche Sheldon.
Brockport	State Normal and Training School	Charles T. McFarlane.
Brooklyn	Training School for Teachers	Emma L. Johnston.
Buffalo	State Normal School	James M. Cassety.
Cohoes	Cohoes Training School	Cora F. Bratton.
Cortland	State Normal and Training School	Francis J. Cheney.
Fredonia	do	Myron T. Dana.
Geneseo	Geneseo State Normal School	James V. Sturges.
Jamaica	Normal and Training School	A. C. McLachlan.
New Paltz	State Normal School	R. W. Abrams.
New York	New York Training School for Teachers	E. N. Jones.
Do	Normal College of the City of New York	George S. Davis.
Oneonta	State Normal School	Percy I. Bugbee.
Oswego	Oswego State Normal and Training School	Isaac B. Poucher.
Plattsburg	State Normal School	Geo. K. Hawkins.
Potsdam	State Normal and Training School	Thomas B. Stowell.
Rochester	Rochester Training School	Edith A. Scott.
Syracuse	Syracuse High School, Normal Department	G. A. Lewis.
NORTH CAROLINA.		
Elizabeth City	State Colored Normal School	P. W. Moore.
Fayetteville	do	E. E. Smith.
Greensboro	State Normal and Industrial School	J. I. Foust.
Painter	Cullowhee Normal and Industrial School	R. L. Madison.
Pembroke	Croaton Normal College	H. L. Edens.
Winston	Slater Industrial and State Normal School	C. G. O'Kelly.
NORTH DAKOTA.		
Mayville	State Normal School	Thos. A. Hillyer.
Valley City	do	George A. McFarland.
OHIO.		
Akron	Perkins Normal School	Lee R. Knight.
Cleveland	Cleveland Normal and Training School	J. W. McGilvrey.
Columbus	Columbus Normal School	Margaret W. Sutherland.
Dayton	Dayton Normal School	Grace A. Greene.
Toledo	Toledo Normal Training School	Mrs. Ella M. R. Baird.
OKLAHOMA.		
Alva	Northwestern State Normal School	Walter L. Ross.
Edmond	Central State Normal School	Thos. W. Butcher.
Langston	Colored Agricultural and Normal University	Inman E. Page.
Weatherford	Southwestern State Normal School	J. F. Sharp.
OREGON.		
Ashland	Southern Oregon State Normal School	Harry M. Shafer.
Drain	Central Oregon State Normal School	A. L. Briggs.
Monmouth	State Normal School	Edwin De Vore Ressler.
Weston	Eastern State Normal School	Robert Carver French.
PENNSYLVANIA.		
Bloomsburg	State Normal School	D. J. Waller, jr.
California	Southwestern State Normal School	Theo. B. Noss.
Clarion	Clarion State Normal School	J. George Becht.
East Stroudsburg	East Stroudsburg State Normal School	E. L. Kemp.
Edinboro	State Normal School	John F. Bigler.
Indiana	Indiana Normal School of Pennsylvania	James E. Ament.
Kutztown	Keystone State Normal School	A. C. Rothermel.
Lockhaven	Central State Normal School	J. R. Flickinger.
Mansfield	Mansfield State Normal School	Andrew T. Smith.
Millersville	First Pennsylvania State Normal School	E. Oram Lyte.

V.—Principals of Normal Schools—Continued.

1.—*Public normal schools*—Continued.

Location.	Name of institution.	Principal.
PENNSYLVANIA—cont'd.		
Philadelphia	Philadelphia Normal School for Girls	J. M. Willard.
Pittsburg	Pittsburg High School, Normal Department	Jane Ralston.
Shippensburg	Cumberland Valley State Normal School	Samuel A. Martin.
Slippery Rock	Slippery Rock State Normal School	Albert E. Maltby.
Westchester	State Normal School	George M. Philips.
RHODE ISLAND.		
Providence	Rhode Island State Normal School	Charles S. Chapin.
SOUTH CAROLINA.		
Orangeburg	Colored Normal, Industrial, Agricultural, and Mechanical College of South Carolina.	Thos. E. Miller.
Rockhill	Winthrop Normal College	D. B. Johnson.
SOUTH DAKOTA.		
Aberdeen	Northern Normal and Industrial School	Geo. W. Nash.
Madison	State Normal School	J. W. Heston.
Spearfish	do	F. L. Cook.
Springfield	do	J. S. Frazee.
TENNESSEE.		
Nashville	Peabody Normal School	James D. Porter.
TEXAS.		
Denton	North Texas Normal School	W. H. Bruce.
Detroit	Detroit Normal School	W. S. Woodson.
Huntsville	Sam Houston Normal Institute	H. C. Pritchett.
Prairie View	Prairie View State Normal and Industrial College (colored).	Ed. L. Blackshear.
UTAH.		
Cedar City	Southern Branch of the State Normal School	G. W. Decker.
VERMONT.		
Castleton	State Normal School	Philip R. Leavenworth.
Johnson	do	Edward D. Collins.
Randolph Center	do	Charles H. Morrill.
VIRGINIA.		
Farmville	State Female Normal School	J. L. Jarman.
Hampton	Hampton Normal and Agricultural Institute	H. B. Frissell.
Petersburg	Virginia Normal and Industrial Institute (colored).	J. H. Johnston.
WASHINGTON.		
Bellingham	State Normal School	Edward T. Mathes.
Cheney	do	Harry M. Shafer.
Ellensburg	do	W. E. Wilson.
WEST VIRGINIA.		
Athens	State Normal School	C. L. Bemis.
Fairmount	do	U. S. Fleming.
Glenville	do	John C. Shaw.
Huntington	Marshall College, State Normal School	Lawrence J. Corbly.
Institute	West Virginia Colored Institute	J. McH. Jones.
Shepherdstown	Shepherd College, State Normal School	J. G. Knutti.
West Liberty	West Liberty State Normal School	Lorain Fortney.
WISCONSIN.		
Ladysmith	Rusk County Normal School	R. H. Burns.
Manitowoc	Manitowoc County Teachers Training School	Fred Christiansen.
Menomonie	Dunn County Teachers Training School	G. L. Bowman.
Milwaukee	State Normal School	Charles McKenney.
Oshkosh	do	John A. H. Keith.
Platteville	do	J. W. Livingston.
River Falls	River Falls State Normal School	W. J. Brier.
Stevens Point	State Normal School	John F. Sims.
Superior	Superior State Normal School	V. E. McCaskill.
Wausau	Marathon County Training School	O. E. Wells.
Whitewater	State Normal School	Albert Salisbury.

V.—Principals of Normal Schools—Continued.

2.—*Private normal schools.*

Location.	Name of institution.	Principal.
ALABAMA.		
Cullman	Normal Department, Polytechnic College and Ladies' Institute.	S. A. Fetter.
Falkville	Falkville Normal College	S. M. Goodrich.
Mobile	Emerson Normal Institute	Rev. A. T. Burnell.
Snow Hill	Snow Hill Normal and Industrial Institute	W. J. Edwards.
Tuskegee	Tuskegee Normal and Industrial Institute	B. T. Washington.
ARKANSAS.		
Pea Ridge	Pea Ridge Masonic College	S. C. Parish.
COLORADO.		
Denver	Denver Normal and Preparatory School	R. A. Le Doux.
DISTRICT OF COLUMBIA.		
Washington	Kindergarten Normal Training School	Miss Susan P. Pollock.
FLORIDA.		
Jasper	Jasper Normal Institute	Geo. M. Lynch.
Orange Park	Orange Park Normal and Manual Training School	Mrs. L. St. J. Hitchcock.
GEORGIA.		
Macon	Ballard Normal School	George C. Burrage.
Social Circle	Negro Normal and Industrial School	James A. Love.
Thomasville	Allen Normal and Industrial School	Abbie B. Howland.
ILLINOIS.		
Addison	German Evangelical Lutheran Teachers' Seminary.	E. A. W. Krauss.
Dixon	Dixon College and Normal School	W. H. Williamson.
Hoopeston	Greer College	E. L. Bailey.
Oregon	Wells School for Teachers	H. W. Sullivan.
Rushville	Rushville Normal and Business College	Maxwell Kennedy.
INDIANA.		
Danville	Central Normal College	A. J. Kinnaman.
Indianapolis	Teachers' College of Indianapolis	Eliza A. Blaker.
Rochester	Rochester Normal University	Wm. H. Banta.
Valparaiso	Valparaiso University	H. B. Brown.
IOWA.		
Bloomfield	Southern Iowa Normal School	H. C. Brown.
Denison	Denison Normal School	W. C. Van Ness.
Lemars	Lemars Normal College	Herman H. Thoren.
Perry	Perry Normal School	Helen M. Campbell.
Shenandoah	Western Normal College, Shenandoah Commercial Institute and Musical Conservatory.	J. M. Hussey.
Waukon	Waukon Business College and Normal School	W. L. Peck.
KANSAS.		
Nickerson	Nickerson College	E. B. Smith.
KENTUCKY.		
Hardinsburg	Breckinridge Normal College	Andrew Driskell.
Hazard	Hazard Baptist Institute	W. H. Sasser.
Lexington	Chandler Normal School	Fannie J. Webster.
Louisa	Kentucky Normal College	Walter M. Byington.
Middleburg	Middleburg Normal College	J. S. Lawhorn.
Morehead	Morehead Normal School	F. C. Button.
LOUISIANA.		
New Orleans	Luther College	F. J. Lankenau.
MAINE.		
Lee	Lee Normal Academy	Chas. M. Teague.
MARYLAND.		
Baltimore	Baltimore Normal School (colored)	George Harrison.
MASSACHUSETTS.		
Boston (1069 Boylston)	Froebel School, Kindergarten Normal Classes	Annie C. Rust.
Do	Garland Kindergarten Training School	Mrs. Margaret Stannard.
Do	Kindergarten Training School	Lucy Wheelock.
Do	Perry Kindergarten Normal School	Annie M. Perry.

V.—Principals of Normal Schools—Continued.

2.—*Private normal schools*—Continued.

Location.	Name of institution.	Principal.
MICHIGAN.		
Detroit	Thomas Normal Training School	Jennie L. Thomas.
Petoskey	Graves Normal Academy	M. O. Graves.
MINNESOTA.		
Madison	Normal School of the United Norwegian Lutheran Church.	O. Lokensgaard.
New Ulm	Dr. Martin Luther College	John Schaller.
MISSISSIPPI.		
Tougaloo	Normal Department, Tougaloo University	Frank G. Woodworth.
MISSOURI.		
Chillicothe	Chillicothe Normal Business and Shorthand College.	Allen Moore.
Columbia	Columbia Normal School	Geo. H. Beasley.
Stanberry	Stanberry Normal School	F. L. Maxwell.
NEBRASKA.		
Fremont	Fremont Normal School	W. H. Clemmons.
Santee	Santee Normal Training School	Alfred L. Riggs.
Wayne	Nebraska Normal College	J. M. Pile.
NORTH CAROLINA.		
Asheville	Normal and Collegiate Institute	Edward P. Childs.
Charlotte	Rowan Normal Industrial Institute	C. S. Somerville.
Enfield	Jos. K. Brick Agricultural, Industrial, and Normal School.	T. S. Inborden.
Franklinton	Albion Academy	John A. Savage.
Henderson	Henderson Normal Institute	J. A. Cotton.
Liberty	Liberty Normal College	Thos. C Amick.
Raleigh	St. Augustine's School	Rev. A. B. Hunter.
Wilmington	Gregory Normal Institute	J. H. Arnold.
Winton	Waters Normal Institute	C. S. Brown.
OHIO.		
Ada	Ohio Northern University	L. A. Belt.
Canfield	Northeastern Ohio Normal College	C. O. Allaman.
Dayton	St. Mary's Academy	Brother Joseph Meyer.
Lebanon	National Normal University	J. Oscar Creager.
New Philadelphia	John P. Kuhn's Normal School	John P. Kuhn.
Woodville	Woodville Lutheran Normal School	K. Hemminghaus.
PENNSYLVANIA.		
Cheney	Institute for Colored Youth	Hugh M. Browne.
Muncy	Lycoming County Normal School	H. A. Spotts.
SOUTH CAROLINA.		
Charleston	Avery Normal Institute	Morrison A. Holmes.
Frogmore	Penn Normal and Industrial School	Miss Ellen Murray.
Greenwood	Brewer Normal School	Rev. J. M. Robinson.
Lancaster	Lancaster Normal and Industrial Institute	M. D. Lee.
SOUTH DAKOTA.		
Sioux Falls	Lutheran Normal School	Rev. A. Mikkelsen.
TENNESSEE.		
Dickson	Tennessee Normal School	T. B. Loggins.
Huntingdon	Southern Normal University	J. A. Baber.
Memphis	Le Moyne Normal Institute	A. J. Steele.
Morristown	Morristown Normal Academy	Judson S. Hill.
TEXAS.		
Commerce	East Texas Normal College	W. L. Mayo.
VIRGINIA.		
Keysville	Keysville Mission Industrial School	Wm. H. Hayes.
Lawrenceville	St. Paul Normal and Industrial School	Rev. James S. Russell.
WEST VIRGINIA.		
Harpers Ferry	Storer College	Henry T. McDonald.
WISCONSIN.		
Menomonie	Stout Institute	L. D. Harvey.
Milwaukee	National German-American Teachers' Seminary.	Max Griebsch.
St. Francis	Catholic Normal School of the Holy Family	Rev. M. J. Lochemes.